

# UNITED STATES AIR FORCE

## Committee Staff Procurement Backup Book

### FY 2001 Amended Budget Request



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## AIRCRAFT PROCUREMENT, AIR FORCE

### VOLUME II

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**DTIC QUALITY INSPECTED 3**

**OPR: SAF/FMB**

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# P-1M MODIFICATION REPORT - 01 PBR

02/15/2000

AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
B-2	110001	P CONTRAIL MANAGE	16.6	0.6								17.1
	110005	MILSTAR UHF	6.4	0.1								6.5
	110006	ZSR-63 - BAND 4	25.6	0.1								25.7
	110007	BRU-44A/A BOMB R	3.8	1.6	0.6							6.0
	110008	DISK DRIVE UNIT (D	16.4	0.3								16.6
	110009	JASSM			4.0	0.1						4.2
	110011	POST BLOCK 30 UP			4.3			0.9	9.3			14.4
	110012	SPARE COMPONENT	33.0	7.0	6.6							46.6
	110018	ACES II				0.4	0.6	0.4				1.4
	110019	DDU SOLID STATE		3.5	2.1							5.7
	110022	ARROWHEAD PANE	5.9		0.3	0.6	0.2					7.0
	99999U	LOW COST RETROF	3.3	0.3	0.3	0.3						4.2
	99999X	LOW COST MODIFIC	5.5	0.7	0.5	0.5	0.3	0.4	0.7	0.9	1.1	10.5
	DC101	FM IMMUNITY				1.2						1.2
	T8137	UHF SATCOM/ANDV	5.5			19.1	18.8	5.5				48.9
	Z88888	REPROGRAMMINGS		0.1	1.2							1.3
TOTAL FOR CLASS P			122.0	14.3	19.8	21.7	19.7	6.5	2.0	10.2	1.1	217.3
TOTAL FOR AIRCRAFT B-2			122.0	14.3	19.8	21.7	19.7	6.5	2.0	10.2	1.1	217.3

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## P-1M MODIFICATION REPORT - 01 PBR

MOD	AIRCRAFT CLASS	NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
B-1	P-S	10407A	AFT DC POWER UP	37.1	4.3	2.9							44.3
		4333	FIRE WARNING AND	5.8	2.3	0.9							9.0
		99999A	LOW COST SAFETY		0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.5
<b>TOTAL FOR CLASS P-S</b>				42.9	6.6	3.8	0.0	0.0	0.1	0.0	0.1	0.2	53.8
B-1	P	2649	ADDITIONAL CONVE			4.8							4.8
		3150-R	NAVSTAR GPS - CO	86.2	15.5	38.8	4.7						145.2
		4165	EMERGENCY REST	0.4	0.2	0.3	0.1						1.0
		4252	AVIONICS COMPUT			8.8	1.2	27.2	48.9	52.0	3.4	1.2	142.7
		4253	JDAM/1760 CONVEN	25.0	21.3	10.3	5.5						62.1
		4256	DEFENSIVE SYSTE					2.0	5.6	38.4	65.8	379.5	491.2
		4273	JSOW INTEGRATIO					2.0					2.0
		4274	JASSM INTEGRATIO					4.9					4.9
		5013	RF TOWED DECOY	41.2	34.3	27.4	23.8	20.2	2.7	3.0			152.6
		5047	SIMULATOR UPDAT	26.6		5.7	5.5	2.7					40.5
		5048	WIND CORRECTED			4.8	0.1	19.8	14.6	3.6			42.9
		5052	WAVEFORM GENER	5.0	0.3								5.3
		5055	INTEGRATED DEFE					2.1		4.9	7.7	50.0	64.7
		6039	F101 DIGITAL ENGIN				6.5	7.8	8.6	5.2	0.6		28.6
		8421	LINK 16			12.8							12.8
		99999X	LOW COST MODIFIC	1.2	0.1	0.5	0.0	0.0	0.1	0.0	0.1	0.2	2.2
		DC101	FM IMMUNITY				1.4						1.4
		T4251E	LANCER 101E	22.0	10.0								32.0
		Z88888	REPROGRAMMINGS	1.1	-5.3	7.6							3.4
<b>TOTAL FOR CLASS P</b>				208.7	76.3	121.8	48.8	88.6	80.6	107.1	77.5	430.9	1,240.3

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Totals may not add due to rounding.

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## P-1M MODIFICATION REPORT - 01 PBR

02/15/2000

AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
TOTAL FOR AIRCRAFT B-1			251.7	82.9	125.5	48.8	88.6	80.7	107.1	77.6	431.1	1,294.1

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## P-1M MODIFICATION REPORT - 01 PBR

AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
B-52	P	3150 NAVSTAR GLOBAL	31.5	3.8								35.3
		3194 SITUATION AWARE					17.5	29.0	18.0	17.0		81.5
		3263 INTEGRATED CONV	71.2	9.6	2.6							83.4
		3264 ELECTRO-OPTICAL	4.7	5.4	3.3	1.4						14.8
		3308 VINSON	2.5			0.8	0.5					3.8
		4222 ARC-210 RADIO	21.3	0.8	0.1	5.2	1.5					28.9
		4260 ADVANCED WEAPO	10.5	0.7	0.5	1.0	0.3					12.9
		4270 ECM IMPROVEMEN	1.8	4.8	12.8			6.0	1.5			26.9
		4371 GPS TACAN	15.6	22.0	3.7							41.3
		4693 AVIONICS MIDLIFE I							14.5	14.9		29.4
		99999X LOW COST MODIFIC	0.8	0.2	0.1	0.1		0.2	0.1			1.5
		Z88888 REPROGRAMMINGS		0.2	1.5							1.7
TOTAL FOR CLASS P			159.9	47.5	24.6	8.4	19.7	35.2	34.1	31.9	0.0	361.3
TOTAL FOR AIRCRAFT B-52			159.9	47.5	24.6	8.4	19.7	35.2	34.1	31.9	0.0	361.3

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## P-1M MODIFICATION REPORT - 01 PBR

AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
F-117	P	11326 AP-102 COMPUTER	23.3	0.2								23.5
		11331 STORES MANAGEM			2.6	5.0	5.4	4.4				17.4
		11333 ENHANCED GBU-27		3.9								3.9
		3150 NAVSTAR GLOBAL	37.2	9.6	0.1							46.9
		31904 STEEL COMPRESS	0.3	0.2	0.1							0.6
		31927 OMNIBUS ENGINE M	2.0	0.1	0.4	3.2	0.8	0.3				6.8
		31937 SINGLE CONFIGUR		11.5	19.2	20.6	20.7	16.1	8.1			96.2
		31968 ENGINE ELECTRONI	0.7	0.5		0.3						1.5
		31970 WST HOST COMPU			3.5							3.5
		31971 AFMSS HARDWARE			4.5							4.5
		6846 AIRCRAFT 825			3.0							3.0
		99999S SERVICE BULLETIN	9.8	2.2	1.7	1.2	0.5	0.5	0.1	0.8		16.8
		99999X LOW COST MODIFIC	8.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.6	10.8
		DC101 FM IMMUNITY				1.6						1.6
		Z88888 REPROGRAMMINGS	-0.0	0.0	2.3							2.3
TOTAL FOR CLASS P			82.2	28.5	37.2	32.0	27.4	21.2	8.3	0.8	1.6	239.1
TOTAL FOR AIRCRAFT F-117			82.2	28.5	37.2	32.0	27.4	21.2	8.3	0.8	1.6	239.1

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# P-1M MODIFICATION REPORT - 01 PBR

02/15/2000

AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
A-10	P-S	99999A LOW COST SAFETY	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.5	1.0
TOTAL FOR CLASS P-S												
A-10	P	18202B TF-34 AGB LIFE IMP	1.8						0.5	0.2	1.6	4.0
		3150EG EGI	96.3	26.7	25.5	32.1	7.8	5.4				193.7
		3301A INTEGRATED FLIGH					1.3	7.8	7.5	10.6		27.2
		37120 DIGITAL DATA LINK								27.2	143.7	170.9
		4262 DIGITAL TERRAIN S							8.6			8.6
		7142 COLOR AIRBORNE	3.0	1.5								4.5
		9601 ONBOARD OXYGEN				0.6	3.3	5.7	8.3	27.5		45.4
		9602 COUNTERMEASURE			1.7	1.6	5.3	6.1	7.8	3.8		26.4
		9800 A-10 REGEN						10.1	12.7	74.1		96.9
		9801 1760 BUS						4.0	16.7	80.0		100.8
		99999X LOW COST MODIFIC	0.6	0.0	0.0	0.1	0.0	0.1	0.1	0.5		1.5
		DC101 FM IMMUNITY			1.6							1.6
		Z88888 REPROGRAMMINGS		0.1	0.0							0.2
TOTAL FOR CLASS P												
			101.6	28.3	27.1	33.9	11.3	21.9	42.5	83.7	331.2	681.6
TOTAL FOR AIRCRAFT A-10												
			101.8	28.3	27.1	33.9	11.4	22.0	42.6	83.8	331.7	682.7

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## P-1M MODIFICATION REPORT - 01 PBR

MOD	AIRCRAFT CLASS	NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
F-15	P	10211B	SECONDARY POWE	1.0	0.3	3.3	3.9	2.3	0.6	4.4	1.5	0.1	17.5
		13647B	HIGH PRESSURE W	52.8		1.6							54.4
		16628B	LANDING GEAR WIR	12.6	2.0	0.5	0.6						15.7
		16628E	LG WIRING/SWITCH		1.8	2.3							4.1
		19203B	F100-220E ENGINE	86.2	37.8	54.5	37.3	35.0	68.0	67.2	18.1		404.1
		3150E	GPS	32.0	3.6	5.0	1.1						41.7
		6048	4TH ROBUST BLADE	3.8	0.0								3.8
		6052	2ND VANE INNER AI	0.4	0.5	0.2							1.1
		6054	HYBRID NOZZLE CO	5.1	1.9								6.9
		6060	1ST STAGE TIP SHR	1.5	0.3								1.8
		6071	4TH DISK BRUSH SE	0.9	0.6	0.5							1.9
		6086	SUPER CONVECTIV	3.6	4.3	1.5							9.4
		6106	SECONDARY POWE				4.5	3.7	5.2	6.3	0.0		19.8
		6109	FIRST BRUSH SEAL	2.3	2.2	0.6							5.1
		6141	EAGLE 229 HPT OD	4.1	3.3	1.3							8.7
		6142	COMBUSTER IMPR		0.6	0.6							1.2
		6144	FAN IMPROVEMENT				0.0						0.0
		6145	FUEL NOZZLE DAM			0.5	0.7	0.3					1.5
		6146	IMPROVED DURABI			0.7							0.7
		6147	2ND STAGE FAN IM			0.9	0.9	0.5					2.4
		6148	3RD STAGE FAN IM			2.3	2.0						4.3
		6149	REOPERATED AUG			0.3							0.3
		6155	DIGITAL ELECTRONI				0.0						0.0
		6156	ENHANCED MAINTA			0.2	0.2						0.4
		8049	APG-63V(1) RADAR	105.7	99.8	113.8	117.5	93.8	89.3	4.1	2.5	169.9	796.3

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# P-1M MODIFICATION REPORT - 01 PBR

02/15/2000

AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
	8237	DIGITAL MAP SYSTE		2.9	6.7	12.6	4.8					27.1
	8250	FIGHTER DATA LINK	50.3	44.2	35.4					12.0		141.8
	8265	PROGRAMMABLE A				9.5	14.3	15.8	18.7	2.1	22.3	82.6
	8314	AIR DATA PROCESS			4.7	5.2	5.3	4.4	5.5	4.3	3.2	32.6
	8352	JOINT HELMET-MOU				5.5	18.3	23.7	8.6	24.6	17.6	98.4
	8357	ADVANCED DISPLA							28.1	35.5	33.9	97.5
	8419	ALQ 135, BAND 1.5		25.0	33.0	41.8	70.7	51.3	98.1			320.0
	8420	FDL LINK 16			23.4	13.5			22.2		6.7	65.8
	8454	ACFT WEAPONS CO			1.7							1.7
	99999E	MISC ENGINE UPDA	0.1	0.1	0.0	0.0	0.0					0.2
	99999U	LOW COST RETROF	8.3	0.7	1.3	0.2	0.0	0.0	0.0	0.7	0.0	11.1
	99999X	LOW COST MODIFIC	3.0	0.4	0.3	0.1	0.1	0.3	0.0	1.9	0.0	6.1
	DC101	FM IMMUNITY			3.4	1.1						4.5
	IDECM	COMMON ELECTRIC					0.0	21.1	21.7	22.2	205.5	270.5
	Z88888	REPROGRAMMINGS	0.1	1.3	8.6							10.1
TOTAL FOR CLASS P			373.8	233.8	308.9	258.2	249.2	279.6	284.9	125.5	459.2	2,573.1
TOTAL FOR AIRCRAFT F-15			373.8	233.8	308.9	258.2	249.2	279.6	284.9	125.5	459.2	2,573.1

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## P-1M MODIFICATION REPORT - 01 PBR

MOD	MODIFICATION	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST	TOTAL
AIRCRAFT CLASS	NR	TITLE								IO GO	PROG.
F-16	P-S	18503A	WING BEEF-UP	10.5	0.2	0.6					11.3
		99999A	LOW COST SAFETY	2.0	0.6	0.8	0.0	0.0	0.0	0.0	3.6
		99999Y	LOW COST ENGINE	2.9	0.0	0.8	0.0	0.0	0.0	0.0	3.9
<b>TOTAL FOR CLASS P-S</b>				15.3	0.8	2.2	0.0	0.0	0.1	0.0	18.8
F-16	P	1591	600 GALLON EXTER	10.8	4.0	2.5					17.3
		173009	F110 DIGITAL ENGINE	67.7	24.1	32.4	14.3	9.9	8.5	3.9	161.2
		19229E	FALCON 229 ENGINE	8.3	0.6	1.6	1.0	0.9	1.6		13.9
		3088	RADAR WARNING R	160.0	0.3						160.3
		3090	ALR-56M RCPU Upgr	14.1	1.3	0.8	0.7	0.1			17.0
		3091	ALR-56M Analysis Pr		2.0						2.0
		3150M	NAVSTAR GPS F-	58.5	18.2	18.9	9.6	3.6			108.8
		3450	ALE-47	34.4	2.5	1.5	1.8				40.3
		4260	ADVANCED WEAPO	21.7	2.0	2.5	2.0	4.0	4.0	4.0	54.6
		4262	DIGITAL TERRAIN S	11.5	3.6	10.0				10.5	25.1
		5013	RF TOWED DECOY	57.0	37.8	18.2	6.0	5.1	17.8	6.2	148.2
		52338B	MAIN AIRCRAFT BA	1.4	1.3						2.6
		57U051	RELOCATE FORWA	11.9	0.5	0.2					12.6
		58006A	WOW SWITCH	2.9		0.1	0.0				3.0
		58044B	CHAFF/FLARE PRO	2.2	0.1	0.0	0.0				2.4
		6020	SCREECH / EXHAUS		6.3	6.4					12.7
		602030	BLOCK 30 NIGHT VI	6.1	10.1	9.3	7.2	1.9	0.2		34.9
		602039	BLOCK 42 CAS IMPR			5.2	4.9				10.1
		602040	BLK 40/50 NIGHT VI	5.8	14.5	18.1	21.4	8.9			68.6
		602041	BLOCK 40 CAS IMPR	5.1	4.0	16.4	5.3				30.8
		602140	BLK 40 MODULAR MI					14.9	18.5	72.7	331.0

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## P-1M MODIFICATION REPORT - 01 PBR

MOD AIRCRAFT CLASS	MODIFICATION NR TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
602150	BLK 50 MODULAR MI		24.9	39.6	50.5	44.1	30.7	8.6	4.7		203.0
6022	PRE BLK 40 STRUC	163.0	21.2	11.8	1.9						197.9
602240	BLOCK 40 STRUCTU	66.1	5.9	4.0							76.0
602241	F-16A STRUCTURE I			1.0	2.9	3.1	3.1				10.2
602250	BLOCK 50/52 STRUC				1.0	2.8	4.0				7.9
603030	ALQ-213 COUNTER		9.6	11.8	6.0	2.3					29.7
610240	BLOCK 40 COLOR DI				10.7	10.9	47.2	38.7		105.2	212.7
610250	BLOCK 50 COLOR DI		16.2	25.4	32.8	28.2	20.9	5.5	3.0		132.0
610330	BLOCK 30 ENHANC		9.0	4.7	4.4						18.1
612150	BLOCK 50 AIR-TO-AI			9.9	34.9	49.2	30.3	2.0	1.2		127.4
6300	ON BOARD OXYGEN			3.0							3.0
6400	BLOCK 50 IMPROVE	9.3	0.8	1.3							11.4
650040	BLOCK 40 JOINT HE					6.0	25.7	20.9		58.1	110.7
650050	BLOCK 50 JOINT HE			11.3	20.7	26.7	6.0	8.3			72.9
661640	BLOCK 40 LINK 16 -					12.0	51.1	40.3		93.3	196.8
661650	BLOCK 50 LINK 16 -			18.7	42.6	47.4	6.3	10.5			125.5
99999E	MISC ENGINE UPDA	3.2	0.2	0.8	0.0	0.0	0.0	0.2	0.0		4.5
99999U	LOW COST RETROF	3.6	1.7								5.3
99999X	LOW COST MODIFIC	5.9	1.5								7.4
DC101	FM IMMUNITY			3.1	2.0						5.1
F16PTS	ANG/AFRES TARGE		23.0								23.0
F16TAR	THEATER AIRBORN			6.6							6.6
F18001	F110-GE-100/129 #4			1.8	1.4	0.4					3.5
F18002	F110 MEC	0.6	0.0								0.6
F18003	F110 EXHAUST NOZ	1.4	0.5								1.9

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
F19401		-229 HPT OD FLOW	0.1	0.2	0.6	0.3	0.3	0.4				1.9
F19407		F110-GE-100 T4B PY			0.5	0.5	0.6	1.0	1.1	0.5		4.1
F19410		F110 DEC HARDWA	0.5	0.9	1.6	0.9						4.0
F19411		F100 IMPROVED TU		0.0								0.0
F19412		F110-GE-129 EMS IM			2.4	1.7						4.1
F19413		GE-129 TURBINE FR			0.8	0.8	0.8	0.8				3.2
F19450		PW-229 FUEL NOZZ			0.2	0.3	0.2	0.1				0.8
F19451		PW-229 3rd STAGE F			0.3	1.1	0.1	1.0				2.6
F19452		PW-229 2nd STAGE			0.3	1.0						1.3
F19453		F100 ENHANCED M			0.1	0.1						0.2
F19454		PW-229 IMPROVED			0.2							0.2
F19455		PW-229 DEEC LOGI				0.0						0.0
Z88888		REPROGRAMMINGS		6.7	5.3							12.0
TOTAL FOR CLASS P			733.1	255.7	280.9	248.8	255.3	246.0	240.4	193.0	431.7	2,884.9
TOTAL FOR AIRCRAFT F-16			748.4	256.4	283.1	248.8	255.3	246.1	240.8	193.1	431.7	2,903.7

Totals may not add due to rounding.

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
AT-37	P-S	99999A LOW COST SAFETY	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.7
TOTAL FOR CLASS P-S												
AT-37	P	99999X LOW COST MODIFIC	0.8									0.8
		Z88888 REPROGRAMMINGS		0.0	0.0							0.0
TOTAL FOR CLASS P												
			0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
TOTAL FOR AIRCRAFT AT-37												
			0.9	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	1.5

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
C-5	3150	NAVSTAR GLOBAL	77.3	15.0	0.4							92.6
	3455	AIRLIFT DEFENSIVE	19.6	5.1	2.1	0.4						27.1
	6032	COMPARTMENT FL	4.8	0.0	1.4							6.2
	6037	TF39 ENGINE HIGH	59.7	41.0	31.8	35.3	12.5					180.3
	6038	AVIONICS MODERNI		10.3	27.7	59.6	114.8	131.5	21.9	2.5		368.2
	6103	HYDRAULIC SURGE			2.9							2.9
	6151	FUEL FLOW INDICA		6.6								6.6
	6154	C-5 RELIABILITY EN					17.3	128.7	318.5	486.0	4,399.2	5,349.8
	7788	FUEL FLOW TRANS			2.6							2.6
	8097	SIM UPGRADE						3.0				3.0
	96004	8.33 RADIO	13.9	2.5								16.4
	99999X	LOW COST MODIFIC	3.1		0.0	0.1	0.1	0.1	0.1	0.1		3.6
	DC101	FM IMMUNITY	3.5		3.3							6.8
	Z88888	REPROGRAMMINGS	-4.0	2.2	5.5							3.7
TOTAL FOR CLASS P			177.8	82.6	77.6	95.4	144.6	263.4	340.5	488.6	4,399.2	6,069.7
TOTAL FOR AIRCRAFT C-5			177.8	82.6	77.6	95.4	144.6	263.4	340.5	488.6	4,399.2	6,069.7

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
C-9	3009	REENGINE	5.2	2.5	3.7	0.8						12.2
	3149T	TRAFFIC ALERT & C	8.4	4.7								13.1
	6030	REDUCED VERTICA		3.8	4.4							8.2
	9709	GLOBAL AIR TRAFFI					4.0	6.6	13.7			24.4
	99999S	SERVICE BULLETIN	14.5	0.6	0.7	0.6	0.7	0.8	1.0	1.0		19.8
	99999X	LOW COST MODIFIC	3.6	0.2	0.1	0.1	0.0	0.6	0.1	0.1		4.7
	TAWS	TERRAIN AWARENE		2.2	5.3	1.8						9.2
	Z88888	REPROGRAMMINGS	-2.0	0.3	0.9							-0.8
TOTAL FOR CLASS P			29.7	14.2	15.1	3.3	4.7	8.0	14.8	1.1	0.0	90.8
TOTAL FOR AIRCRAFT C-9			29.7	14.2	15.1	3.3	4.7	8.0	14.8	1.1	0.0	90.8

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIORITY	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
C-17	P-S	99999A LOW COST SAFETY									1.9	3.8
TOTAL FOR CLASS P-S												
C-17	P	0399 AIRLIFT DEFENSIVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9	3.8
		4660 OPEN SYSTEMS CO			2.0	1.1	0.6	0.6	0.8	0.3	0.3	5.4
		5029 AERIAL DELIVERY S				1.3	9.9	31.3	28.4	6.7	6.7	77.6
		6005 TROOP DOOR AFT	1.5		0.6	2.1	2.6	1.2				6.5
		6008 AEROMED LITTER S		0.8	0.2							2.5
		6015 CONTAINER DELIVE	5.6	2.7	4.2	3.6	3.8	2.0				21.9
		6026 400 POUND PARATR	1.5	1.4								2.9
		6042 SURE-COMM	5.0	2.4	1.3	0.7	0.7	3.6	4.2	0.7		18.7
		6053 MISSION COMPUTE	2.0	0.3								2.3
		6200 AIRCRAFT LIFETIME	11.7	2.1			4.1	39.3	58.7	44.1		13.9
		6201 GPS INTEGRITY MO	0.6	10.2	13.1	5.3						146.2
		6204 CARGO COMPARTM							0.1	7.9	136.4	29.3
		6205 MAINTAINABILITY IM								47.2	267.2	144.4
		6206 AVIONICS BLOCK U						0.2	10.0	219.8	230.0	314.4
		6208 CARGO COMPARTM					0.7	40.3	68.2	51.0	160.2	230.0
		7987 ELECTRICAL SYSTE			3.0						3.0	160.2
		8332 SIDEWALL LINER/O		1.2	5.3	7.4	7.2	3.9			24.9	3.0
		8501 CABIN PRESSURIZA			2.0	2.1					4.1	24.9
		8629 LARGE AIRCRAFT I					33.1	51.1	48.6	6.2	139.0	4.1
		9596 LOOSE EQUIPMENT				1.3	3.0	2.5	0.7		7.4	139.0
		9703 DUAL ROW AIRDRO	0.1	0.4	1.0						1.5	7.4
		9705 ELECTRONIC FLIGH	0.8	8.0	6.0	2.3					17.0	1.5
		9706 SOFTWARE BLOCK					0.7	2.7	3.4	6.8	13.7	17.0

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
9707		RM&A MODS					0.0	1.7	8.1	10.4	28.2	48.4
9709		GLOBAL AIR TRAFFI		4.3	31.5	33.3	9.1					78.2
9709B		AUTOMATED DEPE							20.3	10.5	21.4	52.2
9710		BLOCK 12 SOFTWA			2.2	1.7						3.9
9713		RM&A MODS (FY00)			0.1	1.5	4.1	1.2				6.8
9714		STATION KEEPING			0.1	2.0	4.7					6.8
9715		HF DATA LINK (HFD			1.9	4.3	1.4					7.7
9716		REQUIRED NAV PE			2.0	3.6	1.2					6.8
9717		AIRCREW DATA TR		4.3								4.3
9721		ALTERNATE EEC P		1.1	1.1	1.1	0.4					3.6
9722		SLAT TRACK DOOR		1.3	1.3							2.6
9723		FIXED LEADING ED			0.2	4.0	4.0	3.2				11.5
9725		SOFTWARE BLOCK			2.2	2.2						4.8
9726		COMBUSTION EXIT		20.0	39.5	19.5	30.7	15.4	2.4			127.7
9728		CABIN PRESSURIZA		1.1	2.5	1.2						4.7
9729		UNSAT LOCATION A						0.1	4.7	13.3	8.4	26.5
9732		COCKPIT REAL EST						0.0	0.4	1.2	0.8	2.4
99999X		LOW COST MODIFIC			0.1	0.2	0.1	0.1	0.1	0.1	0.3	1.0
SIM-17		Simulator Upgrade						3.2				3.2
TAWS		TERRAIN AWARENE			1.4	12.2	17.5	5.4				36.5
Z88888		REPROGRAMMINGS	0.2	1.1	5.9							7.2
TOTAL FOR CLASS P			29.1	51.3	95.0	97.1	150.9	179.1	231.2	252.4	747.4	1,833.6
TOTAL FOR AIRCRAFT C-17			29.1	51.3	95.0	97.1	150.9	179.1	231.2	254.3	749.3	1,837.4

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
C-21	P	3149T	5.4	18.5	5.5	1.1						30.5
		9702		6.5								6.5
		99999S	2.9	0.1	0.1	0.1	2.7	2.6	1.5	1.5		11.4
		DC101		1.6								1.6
		TAWS		15.4	3.2	0.7						19.3
		Z8888	0.5	5.2	0.6							6.3
TOTAL FOR CLASS P			8.8	47.2	9.3	1.9	2.7	2.6	1.5	1.5	0.0	75.4
TOTAL FOR AIRCRAFT C-21			8.8	47.2	9.3	1.9	2.7	2.6	1.5	1.5	0.0	75.4

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
C-22	P	99999S SERVICE BULLETIN	1.3	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.6
		Z88888 REPROGRAMMINGS		0.0	0.0							0.0
TOTAL FOR CLASS P			1.3	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.6
TOTAL FOR AIRCRAFT C-22			1.3	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.6

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
C-32	P	9606 COMMUNICATIONS				18.0	33.7					51.7
		9709 GLOBAL AIR TRAFFI				5.4	2.0	6.7				14.0
		99999S SERVICE BULLETIN			0.3	0.1	0.1	0.1				0.6
		99999X LOW COST MODIFIC			0.2	0.1	0.1	0.1				0.5
		Z88888 REPROGRAMMINGS			0.0							0.0
TOTAL FOR CLASS P			0.0	0.0	0.5	23.6	35.9	6.9	0.0	0.0	0.0	66.8
TOTAL FOR AIRCRAFT C-32			0.0	0.0	0.5	23.6	35.9	6.9	0.0	0.0	0.0	66.8

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
C-37	P	99999S SERVICE BULLETIN			0.3	0.3	0.3	0.3	0.3	0.3		1.8
		99999X LOW COST MODIFIC			0.1	0.1	0.1	0.1	0.1	0.1		0.4
		Z88888 REPROGRAMMINGS			0.0							0.0
TOTAL FOR CLASS P			0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.0	2.3
TOTAL FOR AIRCRAFT C-37			0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.0	2.3

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AIRCRAFT CLASS	MOD NR	P-S	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
C-141	99999A		LOW COST SAFETY	2.4		0.3	0.6	0.7	0.7	0.7	0.7		6.2
TOTAL FOR CLASS P-S													
C-141	P		13627B AUTOPILOT/COCKPI	2.4	0.0	0.3	0.6	0.7	0.7	0.7	0.7	0.0	6.2
			3149TT TRAFFIC ALERT & C	163.9	5.2								169.2
			3150 NAVSTAR GLOBAL	14.1	22.3	8.7							45.1
			3455 AIRLIFT DEFENSIVE	65.1	3.7								68.7
			99999X LOW COST MODIFIC	26.7	0.9								27.6
			DC101 FM IMMUNITY	2.8		0.1	0.1	0.1	0.1	0.1	0.1		3.4
			Z88888 REPROGRAMMINGS			1.0							1.0
					0.8	0.7							1.4
TOTAL FOR CLASS P													
				272.5	32.8	10.5	0.1	0.1	0.1	0.1	0.1	0.0	316.3
TOTAL FOR AIRCRAFT C-141													
				274.9	32.8	10.8	0.7	0.8	0.8	0.8	0.8	0.0	322.6

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AIRCRAFT CLASS		MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
T-1	P	3150	NAVSTAR GLOBAL	28.3	7.4	0.0							35.6
		Z88888	REPROGRAMMINGS		0.2	0.0							0.2
TOTAL FOR CLASS P				28.3	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.8
TOTAL FOR AIRCRAFT T-1				28.3	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.8

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
T-3	P-S	99999A LOW COST SAFETY	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.6
TOTAL FOR CLASS P-S												
T-3	P	4962 T-3 RECOVERY SYS	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.6
		Z88888 REPROGRAMMINGS			1.9	1.9						3.8
TOTAL FOR CLASS P												
			0.0	0.0	2.1	1.9	0.0	0.0	0.0	0.0	0.0	3.9
TOTAL FOR AIRCRAFT T-3												
			0.3	0.1	2.2	1.9	0.0	0.0	0.0	0.0	0.0	4.5

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
T-38	P-S	10206A FUS STA 325 BULKH	33.9	7.2	7.9	6.2	2.1					57.4
		14207B COCKPIT ENCLOSU	65.1	1.1	2.4	2.1						70.8
		99999A LOW COST SAFETY	1.6			0.0	0.2	0.1	0.0	0.0	0.1	2.0
TOTAL FOR CLASS P-S			100.6	8.3	10.4	8.3	2.3	0.1	0.0	0.0	0.1	130.1
T-38	P	6029 AVIONICS UPGRAD		16.7	31.0	81.0	78.4	97.8	99.5	53.1	123.8	581.2
		6034 T-38 PROPULSION				31.3	59.1	65.5	68.1	65.1	452.1	741.1
		99999X LOW COST MODIFIC				0.0	0.0	0.0	0.0	0.0	0.1	0.1
		Z88888 REPROGRAMMINGS		0.1	2.6							2.8
TOTAL FOR CLASS P			0.0	16.8	33.6	112.2	137.5	163.3	167.6	118.1	576.0	1,325.2
TOTAL FOR AIRCRAFT T-38			100.6	25.1	44.0	120.5	139.8	163.4	167.6	118.1	576.1	1,455.2

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
T-41	P	99999X LOW COST MODIFIC	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.9
		Z88888 REPROGRAMMINGS		0.0	0.0							0.0
TOTAL FOR CLASS P			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.9
TOTAL FOR AIRCRAFT T-41			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.9

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
T-43	P	3149F FLIGHT DATA RECO	4.9	0.8								5.7
		3149T TRAFFIC ALERT & C	3.1						1.7	6.5		11.3
		3150 NAVSTAR GLOBAL	5.4	1.3								6.7
		99999S SERVICE BULLETIN	1.2	0.4	0.7	0.3	0.2	0.2	1.7	1.3		5.9
		99999X LOW COST MODIFIC	1.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1		1.8
		TAWS TERRAIN AWARENE				4.5	3.5		3.7	2.9		14.5
		Z88888 REPROGRAMMINGS		3.1	0.0							3.1
TOTAL FOR CLASS P			15.7	5.7	0.7	4.9	3.7	0.3	7.2	10.7	0.0	49.0
TOTAL FOR AIRCRAFT T-43			15.7	5.7	0.7	4.9	3.7	0.3	7.2	10.7	0.0	49.0

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
KC-10	P-S	99999A LOW COST SAFETY	0.6	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.8
TOTAL FOR CLASS P-S												
KC-10	P	3149T2 TCAS AND TAWS	6.3	14.4	16.6	4.6					0.0	41.9
		3150 NAVSTAR GLOBAL	61.4	4.3	2.5							68.2
		4369 REPLACE PYLONS 1	3.3	2.3	4.3	2.3	1.1	0.8				14.1
		9702 8.33 KHZ VHF RADI	2.0	0.1								2.1
		9709 GLOBAL AIR TRAFFI		0.6	36.2	30.0	19.8					86.6
		9709B AUTOMATED DEPE							3.0	1.7		4.8
		99999S SERVICE BULLETIN	20.5	3.6	3.9	2.9	1.2	1.8	1.9	1.9		37.9
		99999X LOW COST MODIFIC	3.2	0.0	0.1	0.1	0.0	0.0	0.1	0.1		3.6
		DC101 FM IMMUNITY			2.4	1.6						4.0
		SIM-10 SIMULATOR UPGRA	11.6	12.2	6.4	7.6	13.7	9.6				61.2
		Z88888 REPROGRAMMINGS	0.2	0.7	2.4							3.3
TOTAL FOR CLASS P												
			108.5	38.3	38.5	55.3	46.2	32.0	5.0	3.7	0.0	327.6
TOTAL FOR AIRCRAFT KC-10												
			109.1	38.3	38.6	55.4	46.2	32.1	5.0	3.7	0.0	328.4

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Totals may not add due to rounding.

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# P-1M MODIFICATION REPORT - 01 PBR

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
C-12	P	3149F FLIGHT DATA RECO	11.5	1.5								13.1
		99999S SERVICE BULLETIN	1.1	0.1	0.5	0.1	0.3	0.3	0.3	0.3		3.1
		99999X LOW COST MODIFIC	1.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1		1.5
		TAWS TERRAIN AWARENE		1.0	5.4	1.4						7.8
		Z88888 REPROGRAMMINGS	0.5	0.1	0.4							1.0
TOTAL FOR CLASS P			14.2	2.8	6.3	1.5	0.4	0.4	0.4	0.4	0.0	26.4
TOTAL FOR AIRCRAFT C-12			14.2	2.8	6.3	1.5	0.4	0.4	0.4	0.4	0.0	26.4

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# P-1M MODIFICATION REPORT - 01 PBR

02/15/2000

AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
C-18	P	99999S SERVICE BULLETIN	0.2	0.2	0.2	0.3	0.7	0.7	0.7	0.7		3.8
		99999X LOW COST MODIFIC	4.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1		5.0
		Z88888 REPROGRAMMINGS		0.0	0.0							0.0
TOTAL FOR CLASS P			4.5	0.3	0.3	0.3	0.8	0.8	0.8	0.8	0.0	8.8
TOTAL FOR AIRCRAFT C-18			4.5	0.3	0.3	0.3	0.8	0.8	0.8	0.8	0.0	8.8

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# P-1M MODIFICATION REPORT - 01 PBR

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
C-20	P	3149T TRAFFIC ALERT & C	1.6	1.7								3.3
		3150 NAVSTAR GLOBAL	14.7	2.5								17.2
		9709 GLOBAL AIR TRAFFI				8.6	5.5	1.9				16.0
		99999S SERVICE BULLETIN	2.1	0.3	0.3	0.4	0.4	0.6	0.4	0.4		5.0
		99999X LOW COST MODIFIC	3.4	0.1	0.1	0.3	0.2	0.3	0.1	0.1		4.5
		TAWS TERRAIN AWARENE	1.7	1.7	4.7	4.6						12.6
		Z88888 REPROGRAMMINGS		0.1	0.3							0.4
TOTAL FOR CLASS P			23.4	6.5	5.4	5.2	9.2	6.4	2.4	0.5	0.0	59.0
TOTAL FOR AIRCRAFT C-20			23.4	6.5	5.4	5.2	9.2	6.4	2.4	0.5	0.0	59.0

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# P-1M MODIFICATION REPORT - 01 PBR

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
C-25	P	3149W WINDSHEAR WARNI	7.6		0.2							7.8
		3150 NAVSTAR GLOBAL	19.5	4.2	0.2							23.9
		9330 FUEL QUANTITY IND		3.1								3.1
		9709 GLOBAL AIR TRAFFI		2.6	7.1		0.6					10.3
		99999S SERVICE BULLETIN	6.6	0.2	0.7	0.0	0.7	0.0	0.8	0.9		9.9
		99999X LOW COST MODIFIC		0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.7
		TAWS TERRAIN AWARENE	2.9		0.3							3.2
		Z88888 REPROGRAMMINGS	1.3	-2.9	0.6							-1.0
TOTAL FOR CLASS P			37.9	7.3	9.1	0.1	1.4	0.1	0.9	1.0	0.0	57.9
TOTAL FOR AIRCRAFT C-25			37.9	7.3	9.1	0.1	1.4	0.1	0.9	1.0	0.0	57.9

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## P-1M MODIFICATION REPORT - 01 PBR

AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIORITY	FISCAL YEAR								COST IO GO	TOTAL PROG.
				FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05			
C-130	P-S	99999A LOW COST SAFETY	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	9.5	11.4
<b>TOTAL FOR CLASS P-S</b>													
C-130	P	11130 PODDED RECONNAI	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	9.5	11.4
		12603B APQ-122 RADAR RE	128.8	4.4	0.8	9.4							9.4
		17605B AUTOPILOT/GCAS	148.4	34.8	42.6	7.8	6.7						134.0
		18600B ELECTRICAL SYSTE	42.0	16.2	27.7	11.3	1.2						240.3
		18603B FUEL QTY SYS UPG	12.0	1.1	1.0	0.9	0.8	0.7	0.8	0.8			98.5
		3149 INSTL OF SOLID-ST			2.6	3.2							18.2
		3150 NAVSTAR GLOBAL	72.3	2.6									5.8
		3190 SCNS	412.6	4.5	0.2								74.8
		3353 HF AUTO COMM PR	43.8	3.2	2.7	0.7							417.3
		3455 AIRLIFT DEFENSIVE	76.3	14.2	20.9	17.3	13.6	8.6	5.0	2.2			50.3
		3587 MICROWAVE LANDI	34.2	0.3									158.2
		6040 ENGINES			6.0		6.4	6.4	6.4	6.4			34.5
		62151B STROBE LIGHTS	11.3	0.0									31.5
		8220 ALR-69 (RWR)	43.5	1.3	0.6			15.5	13.7	15.3	181.5		11.3
		8424 AERSPACE RESCUE	8.1	6.7	6.4	7.2	7.3	14.8	33.2	16.5			271.4
		8448 BLEED AIR DUCT R	0.5	0.8	2.8	2.5	0.8						100.1
		8455 INSTALLATION OF A	5.9	3.8	4.5	0.4							7.4
		8516 IP1310 REPLACEMENT				1.8	1.0						14.7
		8517 C-130 AVIONICS MO	1.8	0.4				36.0	80.8	187.6	2,983.0		2.8
		8520 NVIS	0.4	1.2	0.9	0.2							3,289.7
		8526 ENHANCED TCAS (T	18.2	15.5	16.7	18.5	1.8	4.3	0.3	0.3			2.7
		8553 EMERGENCY ESSE			0.7	0.3							75.4
		8558 INSTALLATION OF 3			1.0	2.9	4.5	2.0	0.2				1.0
													10.7

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## P-1M MODIFICATION REPORT - 01 PBR

AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
8561		SYNCHROPHASER			0.6	4.3	4.5	4.8	1.2			15.4
8562		C-130 GENERATOR			0.7	1.2	2.4	2.6				6.9
8577		ALE-47 CHAFF AND				1.3	4.5	4.6				10.4
8591		ALR-69 UPGRADE					1.5	11.8	10.9	11.0	0.3	35.5
8626		C-130 SIMULATOR U			3.7	4.5	4.1	4.1				16.4
8629		LARGE AIRCRAFT I						33.4	48.9	6.0		88.3
99999M		MISC SIMULATOR U				0.2	0.0	0.0	0.0	0.0	9.5	9.7
99999S		SERVICE BULLETIN	0.4			1.3	0.0	0.0	0.0	0.0	9.5	11.2
99999X		LOW COST MODIFIC	3.7	0.2		1.9	0.0	0.0	0.0	0.0		5.8
CWREPL		SYSTEMS/STRUCTU								12.3	125.4	137.7
DC101		FM IMMUNITY			2.6							2.6
Z88888		REPROGRAMMINGS	-0.6	4.7	11.8							15.9
TOTAL FOR CLASS P			1,063.6	116.0	167.0	89.6	61.1	149.5	201.5	258.4	3,309.2	5,415.8
TOTAL FOR AIRCRAFT C-130			1,063.6	116.0	167.0	91.5	61.1	149.5	201.5	258.4	3,318.7	5,427.3

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# P-1M MODIFICATION REPORT - 01 PBR

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	P-R	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
C-135	P-S	99999A LOW COST SAFETY	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
TOTAL FOR CLASS P-S												
C-135	P	10402B FUEL SAVINGS ADVI	102.1	0.6								102.7
		16405X SCOPE RELOCATIO	0.3	0.0								0.3
		17403B STANDARD FLIGHT	12.4	0.9	0.3	0.4	0.4					14.4
		2984X NUCLEAR HARDENI	0.6	0.5	0.0							1.1
		3009E C-135 REENGINE	487.9	3.0	97.0	0.0	61.4	55.8	142.0	4.3	11.5	862.8
		3009X AUDIBLE COCKPIT	0.8	0.1								0.9
		3009Y RELOCATE SV BOX	0.9	0.1								0.9
		3149F FLIGHT DATA RECO	14.7	15.1	15.9	33.3	19.9	4.2				103.0
		3150PC PACER CRAG (COM	290.0	126.9	153.2	70.1						640.2
		3156 PACER LINK PH II	251.3	0.0								251.3
		3353 HF AUTO COMM PR	20.9	6.4	0.3	1.4						29.1
		4310 INTERPHONE REPL	3.2	17.9	11.6	4.8						37.5
		48604B INSTALLATION OF	2.5	0.2								2.7
		6030 REDUCED VERTICA	10.2	29.3	47.4	37.6	16.4					140.8
		9702 8.33 KHZ VHF RADI		12.8	16.6	51.3						80.7
		9709 GLOBAL AIR TRAFFI		48.4	25.0	78.5	208.9	217.3	144.9	55.6	203.1	981.7
		9734 TURBINE ENGINE M				1.3	1.3					2.6
		99999S SERVICE BULLETIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.1
		99999X LOW COST MODIFIC	5.1	0.9	1.0	0.9	1.3	1.0	1.9	2.0		14.0
		DC101 FM IMMUNITY				7.0						7.0
		KC4218 HIGH RELIABILITY M	8.0	1.9	1.3	1.3	0.8					13.3
		KC4231 MULTIPOINT REFUE	66.7	6.4	4.2	16.1	10.7	3.5	4.2	4.0	77.8	193.5
		SIM135 SIMULATOR UPGRA		10.2	21.9	14.8	11.7	9.8				68.5

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Totals may not add due to rounding.

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# P-1M MODIFICATION REPORT - 01 PBR

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
TAWS	Z88888	TERRAIN AWARENE	43.7	8.9	23.4	9.4	8.8					94.3
	Z88888	REPROGRAMMINGS	2.5	-0.1	27.4							29.7
TOTAL FOR CLASS P			1,323.7	290.4	446.6	328.2	341.7	291.5	293.0	65.9	292.4	3,673.3
TOTAL FOR AIRCRAFT C-135			1,324.0	290.4	446.6	328.2	341.7	291.5	293.0	65.9	292.4	3,673.7

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## P-1M MODIFICATION REPORT - 01 PBR

AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
E-3	3150	NAVSTAR GLOBAL	56.3	2.7	4.9	2.4						66.3
	3371	ELECTRONIC SUPP	303.8	17.8	21.6	3.9						347.2
	3402	DATA ANALYSIS PR	103.4	1.3	0.3	0.1						105.0
	50001A	EXT SEN, COMPUTE	82.1	28.0								110.0
	50001C	EXTEND SENTRY, C	29.1	0.2	0.1							29.4
	50001P	PDMA	5.6	1.5	2.8	1.5	1.0	0.2				12.4
	50001R	EXTEND SENTRY, R	45.1	1.8								47.0
	50001T	BLOCK 40/45 UPGA							75.7	98.0		173.7
	70001C	INTEGRATED BROA	12.5	0.5	1.2	1.2	1.8	1.6				18.8
	7266	RADAR SYSTEM IM	157.8	58.9	63.6	77.6	58.1	49.3	6.7	2.8		474.8
	DC101	FM IMMUNITY			3.5	0.7						4.3
	T8135	SATCOM DAMA				1.3	9.5	8.1	12.4	5.1		36.3
	Z88888	REPROGRAMMINGS		0.1	6.3							6.4
TOTAL FOR CLASS P			795.8	112.8	104.3	88.7	70.4	59.2	94.8	105.8	0.0	1,431.7
TOTAL FOR AIRCRAFT E-3			795.8	112.8	104.3	88.7	70.4	59.2	94.8	105.8	0.0	1,431.7

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## P-1M MODIFICATION REPORT - 01 PBR

AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
E-4 P	3149F	FLIGHT DATA RECO		0.5	0.3	0.5						1.3
	3149T	TRAFFIC ALERT & C	4.2	1.5	1.1	1.2						7.9
	3150	NAVSTAR GLOBAL	24.2	1.9	0.9	4.9						31.9
	3410	NPES (NC2AIS) E-4B			0.3	0.8	0.9	0.5	0.5	0.6		3.7
	3445	UNIVERSAL MODEM					3.9	0.4	0.4			4.7
	3505	MODIFIED MINIATU			5.2	19.7	6.9	1.6				33.4
	4374	E-4 MISSION COMM	13.9	3.4	3.4							20.7
	4381	E-4B INFRASTRUCT						29.1	52.8	17.9		99.8
	9702	8.33 KHZ VHF RADI	0.4	0.2	0.5							1.1
	9709	GLOBAL AIR TRAFFI							5.2	19.6		24.9
	99999S	SERVICE BULLETIN	15.4	1.7	1.0	1.0	2.7	0.9	1.5			24.2
	99999X	LOW COST MODIFIC	3.6	0.6	0.2	1.1	2.5	0.5	0.8	0.7		9.9
	TAWS	TERRAIN AWARENE	2.2	1.3	1.2	2.4						7.1
	Z88888	REPROGRAMMINGS			0.9							0.9
TOTAL FOR CLASS P			63.9	11.0	15.0	31.6	16.9	33.0	61.3	38.8	0.0	271.6
TOTAL FOR AIRCRAFT E-4			63.9	11.0	15.0	31.6	16.9	33.0	61.3	38.8	0.0	271.6

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# P-1M MODIFICATION REPORT - 01 PBR

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	EY-99	EY-00	EY-01	EY-02	EY-03	EY-04	EY-05	COST TO GO	TOTAL PROG.
E-8B P	38200	VANGUARD R&M							3.6	22.9		26.5
	38201	CRP (COMPUTER R		43.2	26.6	30.5	6.1	2.5	7.0			115.9
	38202	SATCOM (SATELLIT				2.9	10.0	11.1	3.0			27.0
	9709	GLOBAL AIR TRAFFI								22.3		22.3
	Z88888	REPROGRAMMINGS		0.3	1.7							2.1

TOTAL FOR CLASS P

0.0 43.5 28.3 33.4 16.2 13.5 13.6 45.3 0.0 193.8

TOTAL FOR AIRCRAFT E-8B

0.0 43.5 28.3 33.4 16.2 13.5 13.6 45.3 0.0 193.8

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AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
H-1	P-S	99999A LOW COST SAFETY		0.1	0.2	0.3	0.2	0.2				1.0
TOTAL FOR CLASS P-S												
H-1	P	3149T TRAFFIC ALERT & C	0.0	0.1	0.2	0.3	0.2	0.2	0.0	0.0	0.0	1.0
		3150 NAVSTAR GLOBAL	3.8	0.0		2.9	0.2					3.1
		8432 INTEGRATED DATA	8.7	0.9								3.8
		99999X LOW COST MODIFIC	0.0	0.8		0.3	0.1	0.3	0.6	0.6		9.6
		Z88888 REPROGRAMMINGS	0.0		0.0							2.8
TOTAL FOR CLASS P												
			12.5	1.7	0.0	3.3	0.3	0.3	0.6	0.6	0.0	19.3
TOTAL FOR AIRCRAFT H-1												
			12.5	1.8	0.3	3.5	0.5	0.5	0.6	0.6	0.0	20.3

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AIRCRAFT CLASS	MOD	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
MH-60	P	4569		0.5								0.5
		6590		3.7	2.4	4.8	4.4	0.9				16.2
		8258	15.5						27.0	7.6	7.7	57.7
		8494				2.6						2.6
		8560				3.5	7.6	7.8				18.9
		9999X	0.6			0.0	0.0	0.0	0.3	0.0	0.0	0.9
		ARR	8.2	11.8	1.4							21.5
		T8415	1.6	4.7	11.1	12.7	23.3	27.1	30.4	32.7	24.3	167.9
		Z88888		0.5	0.3							0.8
TOTAL FOR CLASS P			25.9	21.2	15.2	23.6	35.3	35.8	57.6	40.3	32.0	287.1
TOTAL FOR AIRCRAFT MH-60			25.9	21.2	15.2	23.6	35.3	35.8	57.6	40.3	32.0	287.1

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## P-1M MODIFICATION REPORT - 01 PBR

AIRCRAFT CLASS		MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
OTHER	P-S	99999A	LOW COST SAFETY				0.0	0.2	0.2	0.2	0.3		0.9
<b>TOTAL FOR CLASS P-S</b>				0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.3	0.0	0.9
OTHER	P	14212B	SUPPORT EQUIPME	8.8			0.0	0.1	0.1	0.1			9.0
		3150E9	NAVSTAR GPS (E-9)	0.1	0.1								0.2
		3429	A/B SINGGARS AJ C	49.9	2.3								52.2
		99999J	MISCELLANEOUS L	2.8		0.1	0.1	0.1	0.1				3.2
		99999U	LOW COST RETROF			0.2	2.6	1.1					3.9
		99999V	MISCELLANEOUS L	1.0	0.0	0.0							1.0
		99999X	LOW COST MODIFIC	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0		4.4
		A100	PRECISION ATTACK			10.7	12.2	18.2	24.2	12.8			78.1
		CMWS	COMMON MISSILE				40.0	41.0	37.1	40.9		55.1	214.2
		E900	E-9A TELEMETRY S						5.8	5.3			11.1
		F16HTS	HARM TARGETING	13.9	1.7								15.7
		HTSR7	F-16 HTS R7 POD U						10.4	9.9		9.4	29.7
		T8137	UHF SATCOM/ANDV	47.2	10.0	18.0	14.7	37.6	43.7	41.9	32.4	6.5	251.9
		T8138	AIRBORNE EHF								33.5	243.7	277.2
		T8174	HF MODERNIZATIO	19.5	1.0	0.6							21.1
		Z88888	REPROGRAMMINGS		0.7	1.2							1.9
<b>TOTAL FOR CLASS P</b>				147.6	15.9	20.1	28.2	91.1	103.0	119.5	134.8	314.6	974.8
<b>TOTAL FOR AIRCRAFT OTHER</b>				147.6	15.9	20.1	28.2	91.3	103.2	119.7	135.0	314.6	975.6

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\*\*\* UNCLASSIFIED \*\*\*

Totals may not add due to rounding.



\*\*\* UNCLASSIFIED \*\*\*

# P-1M MODIFICATION REPORT - 01 PBR

02/15/2000

AIRCRAFT CLASS PRDT	MOD NR P	MODIFICATION TITLE PRDT01 PREDATOR MODS	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
			0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
TOTAL FOR CLASS P			0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
TOTAL FOR AIRCRAFT PRDT			0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4

Totals may not add due to rounding.

\*\*\* UNCLASSIFIED \*\*\*

# P-1M MODIFICATION REPORT - 01 PBR

02/15/2000

AIRCRAFT CLASS CLASSI	P	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
		1001	COMPASS CALL	134.3	7.2	8.7	16.7	23.0	31.4	17.6	8.3		247.4
		Z88888	REPROGRAMMINGS			0.6							0.6
TOTAL FOR CLASS P				134.3	7.2	9.3	16.7	23.0	31.4	17.6	8.3	0.0	247.9
TOTAL FOR AIRCRAFT CLASSI				134.3	7.2	9.3	16.7	23.0	31.4	17.6	8.3	0.0	247.9

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\*\*\* UNCLASSIFIED \*\*\*

Totals may not add due to rounding.

\*\*\* UNCLASSIFIED \*\*\*

# P-1M MODIFICATION REPORT - 01 PBR

02/15/2000

AIRCRAFT CLASS	MOD NR	MODIFICATION TITLE	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
DARP P	3009R	REENGINE	172.8	56.2	120.0	59.9	84.9	69.7	13.2	9.0		585.6
	4263	RIVET JOINT	167.7	65.3	62.9	79.0	49.9	47.0	55.5	65.8		593.0
	4265	COMBAT SENT	6.7	7.7	8.1	8.3	8.1	8.7	9.0	9.2		65.8
	4488	U-2 SYERS			5.0							5.0
	4493	U-2 POWER		9.6	9.1	9.9	8.9	9.0	9.2	9.4		65.3
	4500	U-2 COCKPIT UPGR			10.0							10.0
	4600	U-2 DUAL DATA LIN			3.5	8.4	8.4	4.2	8.4	12.6		45.5
SCOUT		ANG SENIOR SCOU					3.0	3.1	3.2	3.4		12.8
Z88888		REPROGRAMMINGS	9.0	-1.5	15.7							23.1
TOTAL FOR CLASS P			356.2	137.2	234.4	165.5	163.2	141.6	98.5	109.4	0.0	1,406.1
TOTAL FOR AIRCRAFT DARP			356.2	137.2	234.4	165.5	163.2	141.6	98.5	109.4	0.0	1,406.1

Totals may not add due to rounding.

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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)					DATE February 2000	
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: B-2A			
	1999	2000	2001	2002	2003	2004
						2005
<b>COST (In Mil)</b>	\$14.272	\$19.821	\$21.723	\$19.737	\$6.539	\$1.959
						\$10.156

This line item funds modifications to the B-2 aircraft. The B-2 is a multi-engine, long range bomber incorporating low-observable ("stealth") technology, enabling it to penetrate enemy air defenses and strike high-value targets. The overall goal of the modifications budgeted in FY01 is to standardize aircraft configuration essentially resulting in 21 "Block 30" B-2 aircraft. The primary modification budgeted in FY01 is the UHF/SATCOM/ANDVT/DAMA Upgrade. The specific modifications budgeted and programmed are below.

CLASS P	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
	110001	CONTRAIL MANAGEMEN	0.6								17.1
	110005	MILSTAR UHF	0.1								6.5
	110006	ZSR-63 - BAND 4	0.1								25.7
	110007	BRU-44A/A BOMB RACK	1.6	0.6							6.0
	110008	DISK DRIVE UNIT (DDU)	0.3								16.6
	110009	JASSM		4.0	0.1						4.2
	110011	POST BLOCK 30 UPDAT		4.3			0.9	9.3			14.4
	110012	SPARE COMPONENT U		6.6							46.6
	110018	ACES II				0.4	0.6	0.4			1.4
	110019	DDU SOLID STATE	3.5	2.1							5.7
	110022	ARROWHEAD PANEL L		0.3	0.6	0.2					7.0
	99999U	LOW COST RETROFIT	0.3	0.3	0.3						4.2
	99999X	LOW COST MODIFICATI	0.7	0.5	0.5	0.3	0.4	0.7	0.9	1.1	10.5
	DC101	FM IMMUNITY			1.2						1.2
	T8137	UHF SATCOM/ANDVT/D			19.1	18.8	5.5				48.9
	Z88888	REPROGRAMMINGS	0.1	1.2							1.3

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 28	PAGE NO. 1
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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: B-2A			
	1999	2000	2001	2002	2003	2004
						2005
COST (In Mil)	\$14.272	\$19.821	\$21.723	\$19.737	\$6.539	\$1.959
						\$10.156

This line item funds modifications to the B-2 aircraft. The B-2 is a multi-engine, long range bomber incorporating low-observable ("stealth") technology, enabling it to penetrate enemy air defenses and strike high-value targets. The overall goal of the modifications budgeted in FY01 is to standardize aircraft configuration essentially resulting in 21 "Block 30" B-2 aircraft. The primary modification budgeted in FY01 is the UHF/SATCOM/ANDVT/DAMA Upgrade. The specific modifications budgeted and programmed are below.

CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
TOTAL FOR CLASS P			14.3	19.8	21.7	19.7	6.5	2.0	10.2	1.1	217.3
TOTAL FOR AIRCRAFT B-2			14.3	19.8	21.7	19.7	6.5	2.0	10.2	1.1	217.3

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 28	PAGE NO. 2
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UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: B-2 MN-110007 BRU-44A/A BOMB RACK R&M I

(Continued)

FY-04		FY-05		TO COMP		TOTAL	
QTY	COST	QTY	COST	QTY	COST	QTY	COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

OTHER

INSTALLATION OF HARDWARE

FY-97 226 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 18 Months

Follow-On Lead Time: 18 Months

Milestones

Contract Date (Month/CY)

Delivery Date (Month/CY)

FY-96

FY-97

01/97

07/98

FY-98

FY-99

FY-00

Installation Schedule

	FY-96	FY-97	FY-98	FY-99	FY-00
Quarters	1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3
Input					
Output					



02/15/2000

FY 2001 PBR

Modification Title and No: JASSM MN-110009

Models of Aircraft Affected: B-2

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: B-2

PE 0101127F Team POWER

**Description/Justification**

This effort integrates the Joint Air-to-Surface Standoff Missile, the only weapons acquisition program on the horizon which is able to meet the launch and leave, range, and precision strike capabilities that currently exist in the B-2 Operational Requirements Document (ORD). This modification provides for Group A hardware (cables and wiring) required for JASSM integration and trainer modifications designed to simulate the JASSM display on the aircraft. The FY01 flight test will have no impact on the Group A hardware and minimal impact on trainer modifications.

Aircraft Breakdown: Active 20, Reserve 0, ANG 0

**Development Status**

The JASSM program office awarded the weapon contract to Lockheed Martin and received a Milestone II decision in the first quarter of FY99. The JASSM integration contract was awarded to Northrop Grumman in May 99. System requirement review is complete. JASSM RDT&E entails development of the mission independent data file, updates to the lab software and the Air Force Mission Support System (AFMSS), Seek Eagle Aerodynamic tests, wind tunnel tests, ground fit checks, and flight tests. One aircraft will be upgraded during development.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)				11.6		33.4		24.3				
PROCUREMENT (3010)							20	0.1				
INSTALL KITS												
KITS NONREC												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER					[5]	4.0						
SUPPORT-EQUIP												
TOTAL COST (BP-1100)						4.0	20	0.1				

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: B-2 MN-110009 JASSM  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				69.2
PROCUREMENT (3010)				
INSTALL KITS			20	0.1
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER			[5]	4.0
SUPPORT-EQUIP				
TOTAL COST (BP-1100)			20	4.2

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 14 Months

Follow-On Lead Time: 9 Months

**Milestones**

	FY-99	FY-00	FY-01
Contract Date (Month/CY)	06/00	01/01	
Delivery Date (Month/CY)	08/01	10/01	

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: POST BLOCK 30 UPDATES MN-110011  
 Models of Aircraft Affected: B-2

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: B-2  
 PE 0101127F Team POWER

Center: ASC - Wright Patterson AFB, OH

**Description/Justification**  
 Post Block 30 updates will implement corrections of deficiencies (non-spec compliant conditions) to the Block 30 baseline program. There are currently several deficiencies to the Block 30 baseline program that need to be addressed. The deficiencies in work include but aren't limited to: Aft Deck IFE erosion, and Uncontained Engine Bay Oil. Failure to implement these fixes as they are developed will result in continued impacts to operability and supportability.

Aircraft Breakdown: Active 21, Reserve 0, ANG 0

**Development Status**  
 Investigation of solutions is underway.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
AWAITING BTR												
TOTAL COST (BP-1100)												
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: B-2 MN-110011 POST BLOCK 30 UPDATES  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT		0.9		9.3				14.4
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
AWAITING BTR								
TOTAL COST (BP-1100)		0.9		9.3				14.4

(Totals may not add due to rounding)

Method of Implementation: COMBINATION

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-00

Contract Date (Month/CY)

Delivery Date (Month/CY)

**Installation Schedule**

Quarters	<u>FY-00</u>			
	1	2	3	4
Input				
Output				

02/15/2000

FY 2001 PBR

Modification Title and No: SPARE COMPONENT UPGRADES MN-110012

Models of Aircraft Affected: B-2

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-2 Class P

Center: ASC - Wright Patterson AFB, OH

PE 0101127F Team POWER

**Description/Justification**

Upgrades current B-2 spare components and support equipment inventory to support the continued increased capability of B-2 aircraft coming from the production line. Failure to retrofit the spare components and support equipment will make the aircraft at Whiteman AFB unsupportable in accordance with the B-2 Essential Employment Capabilities (EEC).

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

**Development Status**

Development done under Northrop EMD contract. F33657-87-C0067.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RD&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
MOD OF SPARES	[837]	33.0	[166]	7.0	[153]	6.6						
TOTAL COST (BP-1100)		33.0		7.0		6.6						
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: B-2 MN-110012 SPARE COMPONENT UPGRADES  
(Continued)

FY-04	FY-05	TO COMP	TOTAL
QTY	QTY	QTY	QTY
COST	COST	COST	COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

MOD OF SPARES

[1,156] 46.6

46.6

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 3 Months

Follow-On Lead Time: 3 Months

**Milestones**

FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
-------	-------	-------	-------	-------	-------

Contract Date (Month/CY) 04/96 07/96 04/97 10/97 10/99

Delivery Date (Month/CY) 07/96 07/97 01/98 01/99 01/00

**Installation Schedule**

Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Input																
Output																

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: DDU SOLID STATE MN-110019  
 Models of Aircraft Affected: B-2

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P

PE 0101127F Team POWER

Center: ASC - Wright Patterson AFB, OH

**Description/Justification**

This change replaces the optical drive assembly from the Disk Drive Unit (DDU) with a solid state flash card data reader assembly. The existing DDU contains significant long-term support issues. The decreasing demand for DDU technology, coupled with the decreasing availability of the skilled labor force required to build spares and repair existing units, is anticipated to significantly raise the DDU support costs, making it unsupportable. The production and repair of the optical drives is a very labor intensive effort and can take up to several months for one unit. This modification makes use of off-the-shelf technology to provide a more reliable and supportable unit. Additionally, it provides the benefits of virtually unlimited storage capacity and easy installation. Three air vehicle upgrades will occur in-line. Air Force Personnel will do the remainder at field level. Short Initial lead-time is due to contractor action to prepare for production of initial kits.

Aircraft Breakdown: Active 21, Reserve 0, ANG 0

**Development Status**

Development complete. Development includes the trial install of a kit in an aircraft.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		1.0				4.4						
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR			[10]	2.5	[11]	1.6						
EQUIPMENT				0.2								
EQUIP NONREC												
CHANGE ORDERS				0.3								
DATA												
SIM/TRAINER												
SUPPORT-EQUIP				0.5	[3]	0.3						
SPARES						0.2						
INSTALLATION OF HARDWARE			[3]	0.0								
FY-99 0 KITS			3	0.0								
TOTAL INSTALL												
TOTAL COST (BP-1100)				3.5								2.1

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: B-2 MN-110019 DDU SOLID STATE  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								5.4
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR					[21]			4.1
EQUIPMENT								0.2
EQUIP NONREC								
CHANGE ORDERS								0.3
DATA								
SIM/TRAINER								0.8
SUPPORT-EQUIP					[3]			0.2
SPARES								
INSTALLATION OF HARDWARE					[3]			0.0
FY-99 0 KITS							3	0.0
TOTAL INSTALL								5.7
TOTAL COST (BP-1100)								

(Totals may not add due to rounding)

Method of Implementation: COMBINATION

Initial Lead Time: 1 Month

Follow-On Lead Time: 12 Months

#### Milestones

	FY-98	FY-99	FY-00
Contract Date (Month/CY)	04/99	10/99	
Delivery Date (Month/CY)	05/99	10/00	

#### Installation Schedule

	FY-98			FY-99			FY-00		
Quarters	1	2	3	4	1	2	3	4	
Input							3		
Output							3		



02/15/2000

FY 2001 PBR

Modification Title and No: LOW COST MODIFICATIONS MN-99999X

Models of Aircraft Affected: B-2

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: B-2

PE 0101127F Team POWER

**Description/Justification**

These funds are required to support B-2 modifications low in cost, but essential to the B-2 baseline aircraft. The Airframe Mounted Accessory Drive (AMAD) Decouple switch change (FY96-00) will correct the problem resulting from uncommanded AMAD Decouple. The BRU-44B/A gas generator mod (FY99) will accommodate the newly designed Weapon Arming Lanyard. The flooring upgrade (FY98-00) will add permanent flooring to the HIAC bay, which will reduce damage that occurs when installing the temporary flooring before performing maintenance. FY01+ funding will be used to improve air vehicle systems including spares & support equipment to meet operator requirements.

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

**Development Status**

As required.

**Projected Financial Plan**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)						
PROCUREMENT (3010)						
INSTALL KITS						
KITS NONRECUR	2.4	0.7	0.5	0.5	0.3	0.4
EQUIPMENT						
EQUIP NONREC						
CHANGE ORDERS						
DATA						
SIM/TRAINER						
SUPPORT-EQUIP						
OGP II	1.0					
FOT&E	2.1					
AWAITING BTR						
TOTAL COST (BP-1100)	5.5	0.7	0.5	0.5	0.3	0.4

(Totals may not add due to rounding)

UNCLASSIFIED

	FY-04 QTY	COST	FY-05 QTY	COST	TO COMP QTY	COST	TOTAL QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT	0.7		0.9		1.1		7.5	
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
OGP II								1.0
FOT&E								2.1
AWAITING BTR								
TOTAL COST (BP-1100)	0.7		0.9		1.1		10.5	
(Totals may not add due to rounding)								
Method of Implementation: CONTRACTOR FACILITY								
Initial Lead Time: 12 Months								
Follow-On Lead Time: 12 Months								

Milestones

FY-94

Contract Date (Month/CY)

Delivery Date (Month/CY)

Installation Schedule

	FY-94
Quarters	1 2 3 4
Input	
Output	

02/15/2000

FY 2001 PBR

Modification Title and No: FM IMMUNITY MN-DC101

Models of Aircraft Affected: B-2

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-2 Class P

PE 0101127F Team POWER

**Description/Justification**

This upgrade will allow the B-2 to operate the instrument landing system in an environment within a band of FM noise (Europe). This upgrade consist of updating the ILS receivers to provide FM noise immunity. There is no Group A required.

Aircraft Breakdown: Active 21, Reserve 0, ANG 0

**Development Status**

No development is required since this is an off the shelf item. Qualification testing is yet to be completed.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR							21	1.1				
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER							[4]	0.1				
SUPPORT-EQUIP							[2]	0.1				
SPARES												
TOTAL COST (BP-1100)							21	1.2				

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: B-2 MN-DC101 FM IMMUNITY  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR			21	1.1
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER			[4]	0.1
SUPPORT-EQUIP			[2]	0.1
SPARES				
TOTAL COST (BP-1100)			21	1.2

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

Milestones

FY-01

Contract Date (Month/CY)

Delivery Date (Month/CY)

02/15/2000

FY 2001 PBR

Modification Title and No: UHF SATCOM/ANDVT/DAMA UPGRADE MN-T8137

Models of Aircraft Affected: B-2

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-2

PE 0101127F Team POWER

#### Description/Justification

COMACC directed integration of SATCOM/DAMA into the B-2 avionics suite using the FY98 Congressional Plus Up. SAF/AQ (15 May 98) directed use of the new multifunction AIT radio. The AIT radio (2 per shipset bought under the AITG Program and installed by user) along with a newly developed RF switch/bus unit (RFSU) and LNA (low noise amplifier)/Diplexer accomplishes COMACC direction to replace the current UHF/VHF line-of-sight (ARC-215) radios with SATCOM/DAMA. The existing UHF LO SATCOM antenna will also be replaced with an improved gain UHF SATCOM antenna. This upgrade will provide ACC with secure, long range voice and data capability, as well as interoperability with other Have Quick II users (allowing the B-2 to participate as part of the total force package) and 8.33KHz spacing on VHF for Eurocontrol. The LO antenna RFSU and LNA/Diplexer development risk is low to moderate. Purchase of the kits in FY01-02 to retrofit the entire fleet is dependent on joint funding in FY00-03. (B-2 PE 11127 contributing in FY98 - \$5.45, FY01 - \$8.9M, FY02 - \$8.02M, FY03 - \$5.5M) and the MILSATCOM Terminals PE 33601 contributing FY01 - \$10.17M, FY02 - \$10.807M). UHF DAMA B-Kit funding not moved from MILSATCOM Terminals Other Procurement Aircraft to B-2 because B-Kits are provided by MILSATCOM Terminals as GFE to the B-2 Program.

Aircraft Breakdown: Active 20, Reserve 0, ANG 0

#### Development Status

Development contract was definitized 4 Nov 1998. One aircraft will be upgraded during development.

#### Projected Financial Plan

	PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		79.9										
PROCUREMENT (3010)												
INSTALL KITS							6	12.1	14	18.8		
KITS NONRECUR								2.0				
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER	[2]	5.5										
SUPPORT-EQUIP												
INSTALLATION OF HARDWARE												
FY-01											[6]	2.4
6 KITS											[14]	3.1
FY-02											20	5.5
14 KITS												
TOTAL INSTALL												
TOTAL COST (BP-1100)		5.5					6	19.1	14	18.8		5.5

(Totals may not add due to rounding)

UNCLASSIFIED

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								79.9
PROCUREMENT (3010)								
INSTALL KITS					20			30.9
KITS NONRECUR								2.0
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								5.0
SIM/TRAINER					[2]			5.5
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-01 6 KITS					[6]			2.4
FY-02 14 KITS					[14]			3.1
TOTAL INSTALL					20			5.5
TOTAL COST (BP-1100)					20			48.9

(Totals may not add due to rounding)

Method of Implementation: COMBINATION

Initial Lead Time: 14 Months

Follow-On Lead Time: 14 Months

**Milestones**

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)				06/01	11/01		
Delivery Date (Month/CY)				08/02	01/03		

**Installation Schedule**

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Quarters	1	2	3	4	1	2	3
Input							
Output							

## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications				P-1 ITEM NOMENCLATURE: B-1B			
	1999	2000	2001	2002	2003	2004	2005
COST (In Mil)	\$82.920	\$125.543	\$48.793	\$88.646	\$80.658	\$107.106	\$77.637

This line item funds modifications to the B-1B aircraft. The B-1 is a multi-engine, supersonic, long range bomber capable of delivering nuclear or conventional munitions. The overall goal of the modifications budgeted in FY01 is to increase conventional weapons capabilities and improve reliability and maintainability. The primary modification budgeted in FY01 is the RF Towed Decoy System. The specific modifications budgeted and programmed are below.

MOD NR	MODIFICATION TITLE	FY-99 4.3	FY-00 2.9	FY-01 0.1	FY-02 0.1	FY-03 0.1	FY-04 0.1	FY-05 0.1	COST TO GO	TOTAL PROG. 44.3
10407A	AFT DC POWER UPGR									
4333	FIRE WARNING AND EX	2.3	0.9							9.0
99999A	LOW COST SAFETY MO	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5
TOTAL FOR CLASS P-S										
P 2649	ADDITIONAL CONVENTI	6.7	3.9	0.1	0.1	0.1	0.1	0.1	0.2	53.8
3150-R	NAVSTAR GPS - COMM	15.5	4.8							4.8
4165	EMERGENCY RESTRAI	0.2	38.8	4.7						145.2
4252	AVIONICS COMPUTERS		0.3	0.1						1.0
4253	JDAM/1760 CONVENTIO		8.8	1.2	27.2	48.9	52.0	3.4	1.2	142.7
4256	DEFENSIVE SYSTEM U	21.3	10.3	5.5						62.1
4273	JSOW INTEGRATION				2.0	5.6	38.4	65.8	379.5	491.2
4274	JASSM INTEGRATION				2.0					2.0
5013	RF TOWED DECOY SYS				4.9					4.9
5047	SIMULATOR UPDATES	34.3	27.4	23.8	20.2	2.7	3.0			152.6
5048	WIND CORRECTED MU		5.7	5.5	2.7					40.5
5052	WAVEFORM GENERAT		4.8	0.1	19.8	14.6	3.6			42.9
		0.3								5.3

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 29	PAGE NO. 1
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UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: B-1B			
	1999	2000	2001	2002	2003	2004
						2005
COST (In Mil)	\$82.920	\$125.543	\$48.793	\$88.646	\$80.658	\$107.106
						\$77.637

This line item funds modifications to the B-1B aircraft. The B-1 is a multi-engine, supersonic, long range bomber capable of delivering nuclear or conventional munitions. The overall goal of the modifications budgeted in FY01 is to increase conventional weapons capabilities and improve reliability and maintainability. The primary modification budgeted in FY01 is the RF Towed Decoy System. The specific modifications budgeted and programmed are below.

CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
5055		INTEGRATED DEFENSI			6.5	2.1	4.9	7.7	50.0	64.7	
6039		F101 DIGITAL ENGINE				7.8	8.6	5.2	0.6	28.6	
8421		LINK 16		12.8						12.8	
99999X		LOW COST MODIFICATI	0.1	0.5	0.1	0.1	0.1	0.1	0.2	2.2	
DC101		FM IMMUNITY			1.4					1.4	
T4251E		LANCER 101E	10.0							32.0	
Z88888		REPROGRAMMINGS	0.1	7.6						3.4	
TOTAL FOR CLASS P			81.7	121.8	48.9	88.7	80.6	107.2	77.5	430.9	1,240.3
TOTAL FOR AIRCRAFT B-1			88.4	125.6	49.0	88.8	80.7	107.3	77.6	431.1	1,294.1

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 29	PAGE NO. 2
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02/15/2000

FY 2001 PBR

Modification Title and No: AFT DC POWER UPGRADE MN-10407A

Models of Aircraft Affected: B-1B

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-1 Class P-S

PE 0101126F Team POWER

Description/Justification

B-1 aircraft periodically experience electrical bus failure and subsequent rapid discharge of the aircraft aft battery, which results in a safety of flight condition. The aircraft requires modification to provide redundant power to the aft and fwd DC power busses & replacement of the current NICAD battery which has low reliability. Kit quantities do not match aircraft quantities due to loss of one aircraft Sep 97 and another Feb 98. Modification was on both these aircraft. One aircraft was modified at field level using a kit procured with FY94 funds.

Aircraft Breakdown: Active 77, Reserve 0, ANG 16

Development Status

Complete.

Projected Financial Plan

RDT&amp;E (3600)

## PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

MOD OF SPARES

OGC

## INSTALLATION OF HARDWARE

FY-94 11 KITS

FY-95 23 KITS

FY-96 23 KITS

FY-97 23 KITS

FY-98 15 KITS

TOTAL INSTALL

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
	95	9.0				
	[95]	0.7				
		5.4				
		1.6				
		1.0	1.1			
		1.4				
		0.7				
	[39]	0.7	0.2			
		0.0				
		2.4				
	[11]	5.5				
	[23]	5.1				
	[22]	3.7				
	[17]	1.6				
	[6]	2.5	[6]			
	[9]	15	6			
	73	16.7	1.8			
			4.3			
			2.9			

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

**Fact Sheet: B.**

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				95
KITS NONRECUR				9.0
EQUIPMENT				0.7
EQUIP NONREC				5.4
CHANGE ORDERS				1.6
DATA				
SIM/TRAINER				2.1
SUPPORT-EQUIP				1.4
MOD OF SPARES				0.7
OGC				0.9
				0.0
INSTALLATION OF HARDWARE				
FY-94 11 KITS				[11]
FY-95 23 KITS				2.4
FY-96 23 KITS				5.5
FY-97 23 KITS				[23]
FY-98 15 KITS				[22]
				5.1
				[23]
				5.3
				[15]
				4.2
TOTAL INSTALL				94
				22.6
TOTAL COST (BP-1100)				95
				44.3

(Totals may not add due to rounding)

### Method of Implementation: COMBINATION

**Initial Lead Time: 15 Months**

**Follow-On Lead Time: 15 Months**

## Milestones

	<u>FY-94</u>	<u>FY-95</u>	<u>FY-96</u>	<u>FY-97</u>	<u>FY-98</u>	<u>FY-99</u>	<u>FY-00</u>
Contract Date (Month/CY)	03/94	12/94	12/95	12/96	12/97		
Delivery Date (Month/CY)	06/95	03/96	03/97	03/98	03/99		

### **Installation Schedule**

	<u>FY-94</u>		<u>FY-95</u>		<u>FY-96</u>		<u>FY-97</u>		<u>FY-98</u>		<u>FY-99</u>		<u>FY-00</u>									
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
Input					1	3	4	6	5	8	3	4	7	6	2	5	3	5	4	2		
Output						1	1	5	5	7	5	5	5	6	9	5	6	5	3	3	6	4

02/15/2000

FY 2001 PBR

Modification Title and No: ADDITIONAL CONVENTIONAL BOMB MODULES MN-2649

Models of Aircraft Affected:

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-1 Class P

PE 0101126F Team POWER

**Description/Justification**

This modification procures additional 1760 capable 10-carry conventional bomb modules for expanded conventional capability to meet mission requirements. These modules will support employment of the Wind Corrected Munitions Dispenser (WCMD) as well as currently certified 14-inch lug weapons. This funding was added by Congress in the FY00 Defense Appropriation Act and will be reprogrammed to BP19 for new procurement versus a modification. As such, it is not a new start modification.

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

**Development Status**

Completed.

**Projected Financial Plan**

RD&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
				2	4.0						
					0.8						
				2	4.8						

(Continued)

UNCLASSIFIED

Fact Sheet: B-1 MN-2649 ADDITIONAL CONVENTIONAL BOMB MODULES

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR							2	4.0
EQUIPMENT								0.8
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
TOTAL COST (BP-1100)							2	4.8

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 21 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-00  
Contract Date (Month/CY) 08/00  
Delivery Date (Month/CY) 05/02

02/15/2000

FY 2001 PBR

Modification Title and No: NAVSTAR GPS - COMM UPGRADE (A/J RADIO) MN-3150-R

Models of Aircraft Affected: B-1B

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: B-1

PE 0101126F Team POWER

# Description/Justification

This modification improves the B-1's conventional mission effectiveness by upgrading the communications and navigational systems via the integration/installation of a Miniaturized Airborne Global Positioning System Receiver and an anti-jam radio. The GPS navigation system provides the ability to operate worldwide in all weather conditions with highly accurate, jam-resistant, 3-dimensional position, velocity and time data; increases weapon delivery accuracy; and provides required interfaces for GPS-aided munitions (e.g., JDAM & JSOW). The communications upgrade portion of the modification installs an anti-jam UHF/VHF/SINCGARS radio with SATCOM and voice only Demand Assigned Multiple Access (DAMA) capability to allow the aircraft to communicate with the force package when operating in hostile airspace. GPS/Comm components are priced as single kits and installs. Two test aircraft received modification during EMD program. No retrofit is required.

Aircraft Breakdown: Active 77, Reserve 0, ANG 16

## Development Status

Development Complete.

## Projected Financial Plan

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		378.0		0.8								
PROCUREMENT (3010)												
INSTALL KITS	91	29.7										
KITS NONRECUR												
EQUIPMENT	[91]	40.3										
EQUIP NONREC						0.2						
CHANGE ORDERS		0.3										
DATA		2.4		0.2								
SIM/TRAINER	[29]	1.7										
SUPPORT-EQUIP		2.6				1.0						
GFP		4.3				2.6						
ICS				0.3								
PMA						1.0				0.2		
INSTALLATION OF HARDWARE												
FY-96 2 KITS	[2]	1.4										
FY-97 28 KITS	[6]	3.5	[22]	14.9	[53]	34.1	[8]	4.5				
FY-98 61 KITS												
TOTAL INSTALL	8	4.9	22	14.9	53	34.1	8	4.5				
TOTAL COST (BP-1100)	91	86.2		15.5		38.8		4.7				

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: B-1 MN-3150-R NAVSTAR GPS - COMM UPGRADE (A/J RADIO)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								378.8
PROCUREMENT (3010)								
INSTALL KITS					91		91	29.7
KITS NONRECUR								
EQUIPMENT					[91]		[91]	40.3
EQUIP NONREC								
CHANGE ORDERS								0.5
DATA								2.6
SIM/TRAINER					[29]		[29]	1.7
SUPPORT-EQUIP								3.6
GFP								6.9
ICS								0.3
PMA								1.2
INSTALLATION OF HARDWARE								
FY-96 2 KITS					[2]		[2]	1.4
FY-97 28 KITS					[28]		[28]	18.4
FY-98 61 KITS					[61]		[61]	38.6
TOTAL INSTALL					91		91	58.3
TOTAL COST (BP-1100)							91	145.2

(Totals may not add due to rounding)

Method of Implementation: COMBINATION

Initial Lead Time: 18 Months

Follow-On Lead Time: 16 Months

Milestones

Contract Date (Month/CY)  
Delivery Date (Month/CY)

FY-93

FY-94

FY-95

FY-96

FY-97

FY-98

FY-99

FY-00

FY-01

FY-02

Installation Schedule

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input										
Output										

FY-01

FY-02

FY-03

FY-04

FY-05

FY-06

FY-07

FY-08

FY-09

02/15/2000

FY 2001 PBR

Modification Title and No: AVIONICS COMPUTERS MN-4252

Models of Aircraft Affected: B-1B

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-1 Class P

PE 0101126F Team POWER

### Description/Justification

This modification increases the B-1's conventional weapons capability by upgrading six avionics computer units (ACUs) with 4 upgraded ACUs and upgrading two Data Transfer Units (DTUs). This increases data processing capability and significantly improves long term supportability. The upgrade also enables simultaneous carriage of weapon types (weapon flexibility) and greatly reduces the software cost and development schedule to add new weapons such as JSOW and JASSM. Ninety-Three kits for the aircraft are being procured and additional equipment is also being procured for upgrading the software labs. This modification is managed with the WCMD integration (MN-5048) [ie; Same contract, same contractor, etc...]. The first 6 kits (kitproof) are procured with a lead time of 17 months. The first lot of production units will be produced with a lead time of 15 months. The second and third lots will be produced with a lead time of 13 months. FY05 installs (29 kits) are currently programmed to be completed with FY04 funds. Action will be taken in the FY02 POM cycle to correct this.

Aircraft Breakdown: Active 77, Reserve 0, ANG 16

### Development Status

EMD completes early first quarter of FY02 and, thus, will not impact production contract award scheduled for second quarter FY02.

### Projected Financial Plan

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		100.7		47.9		49.0		41.5		15.3		
PROCUREMENT (3010)												
INSTALL KITS					6	2.0			19	4.1	35	8.9
KITS NONREC					[6]				[19]	17.5	[35]	33.0
EQUIPMENT						4.0						
EQUIP NONREC						1.9						
CHANGE ORDERS						0.5				1.5		2.6
DATA						0.4				0.3		0.6
SIM/TRAINER									[29]	1.7		1.1
SUPPORT-EQUIP										1.4		1.2
PMA												0.7
GFE										0.3		
INSTALLATION OF HARDWARE												
FY-00							[4]	1.2	[2]	0.5		
FY-02											[4]	0.9
FY-03												
FY-04												
TOTAL INSTALL							4	1.2	2	0.5	4	0.9
TOTAL COST (BP-1100)					6	8.8		1.2	19	27.2	35	48.9

(Totals may not add due to rounding)

UNCLASSIFIED

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								254.4
PROCUREMENT (3010)								
INSTALL KITS	33	8.6					93	23.5
KITS NONRECUR								
EQUIPMENT	[33]	31.5					[93]	86.0
EQUIP NONREC								1.9
CHANGE ORDERS		0.8		1.5		0.1		6.9
DATA		0.2						1.6
SIM/TRAINER							[29]	1.7
SUPPORT-EQUIP		0.6						3.1
PMA		0.2		0.3				1.7
GFE		0.3						1.3
INSTALLATION OF HARDWARE								
FY-00							[6]	1.7
6 KITS								
FY-02		2.3					[19]	3.2
19 KITS	[15]							
FY-03		5.3					[35]	5.3
35 KITS	[35]							
FY-04		2.3	[12]	1.6	[6]	1.1	[33]	5.0
33 KITS	[15]							
TOTAL INSTALL	65	9.8	12	1.6	6	1.1	93	15.1
TOTAL COST (BP-1100)	33	52.0		3.4		1.2	93	142.7

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 17 Months Follow-On Lead Time: 13 Months

**Milestones**

Contract Date (Month/CY)  
Delivery Date (Month/CY)

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06
								11/99		03/02	12/02	11/03		
								04/01		06/03	01/04	12/04		

**Installation Schedule**

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Input														
Output														
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Input														
Output														



02/15/2000

FY 2001 PBR

Modification Title and No: JDAM/1760 CONVENTIONAL ENHANCEMENTS MN-4253

Models of Aircraft Affected: B-1B

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-1 Class P

PE 0101126F Team POWER

### Description/Justification

This modification procures 129 launcher conversion kits to integrate Joint Direct Attack Munitions (JDAM) onto the B-1B aircraft. JDAM is the first Mil-Std-1760 weapon planned for the B-1, so the mod reduces future weapons integration costs by providing the Mil-Std-1760 interface equipment. The first three kits (FY96) are kit-proof units; the remaining 126 kits will be delivered to ACC for field-level installation on existing launchers in the inventory. Each B-1B aircraft can carry up to 3 launchers.

Aircraft Breakdown: Active 77, Reserve 0, ANG 16

### Development Status

Complete.

### Projected Financial Plan

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

ICS

	PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
[31]	21.9		[50]	20.2	[34]	10.3	[14]	4.8				
		0.2		0.5				0.4				
				0.5				0.2				
	2.9			0.1								

TOTAL COST (BP-11000)

25.0

21.3

10.3

5.5

(Totals may not add due to rounding)

UNCLASSIFIED

Fact Sheet: B-1 MN-4253 JDAM/1760 CONVENTIONAL ENHANCEMENTS  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR							[129]	57.2
EQUIPMENT								
EQUIP NONREC								1.0
CHANGE ORDERS								0.9
DATA								
SIM/TRAINER								2.9
SUPPORT-EQUIP								0.1
ICS								
TOTAL COST (BP-1100)								62.1

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 23 Months

Follow-On Lead Time: 22 Months

**Milestones**

	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	06/96	02/97	09/98	01/99	12/99	11/00
Delivery Date (Month/CY)	05/98	12/98	07/00	11/00	10/01	09/02

02/15/2000

FY 2001 PBR

Modification Title and No: FIRE WARNING AND EXTINGUISHING PANEL MN-4333

Models of Aircraft Affected: B-1B

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-1

PE 0101126F Team POWER

**Description/Justification**

Funds will be used to upgrade the Fire Warning and Extinguishing Panel (FWEP), a safety critical device. The current FWEP has been a maintenance and reliability problem. A new panel will solve this problem and ensure proper warning to aircrews of a fire in the engine bay, APU bay, or in overwing fairing area. FY95/96 kit quantities do not match current aircraft quantities due to loss of one aircraft Sep 97 and another Feb 98. As a result of the Feb 98 mishap, the FWEP must be modified to eliminate a single point failure mode that existed in the FY95/96 upgrade kits. Funds in FY98, FY99 and FY00 are budgeted to implement this deficiency fix. Kit quantities in FY98/99/00 reflect the modification kits required to fix the single point failure deficiency.

Aircraft Breakdown: Active 77, Reserve 0, ANG 16

**Development Status**

Complete.

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

OGC

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
108	2.3	0.1	62	2.3	18	0.7						
[20]	2.0					0.1						
	1.2											
	0.1					0.1						

TOTAL COST (BP-1100)

108 5.8 62 2.3 18 0.9

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: B-1 MN-4333 FIRE WARNING AND EXTINGUISHING PANEL

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					188			5.3
KITS NONRECUR								0.1
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								2.2
SIM/TRAINER					[20]			1.2
SUPPORT-EQUIP								0.1
OGC								0.1
TOTAL COST (BP-1100)					188			9.0

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 9 Months

Follow-On Lead Time: 9 Months

Milestones

	<u>FY-95</u>	<u>FY-96</u>	<u>FY-97</u>	<u>FY-98</u>	<u>FY-99</u>	<u>FY-00</u>
Contract Date (Month/CY)	05/96	05/96		07/00	07/00	07/00
Delivery Date (Month/CY)	02/97	02/97		04/01	04/01	04/01

02/15/2000

FY 2001 PBR

Modification Title and No: RF TOWED DECOY SYSTEMS ALE-50 MN-5013

Models of Aircraft Affected: B-1B

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-1

PE 0101126F Team POWER

**Description/Justification**

This modification installs the Navy AN/ALE-50(V)-1 Towed Decoy System (TDS) on the B-1B. The major components of the TDS include 2 launcher controllers, 2 launchers with magazines and canisters, and 8 AN/ALE-50 decoy rounds. These assets will be provided as GFP to Boeing North American, the TDS integrator. TDS will employ the AN/ALE-50 as a repeater decoy to improve the survivability of the B-1B against radar directed threat systems. Funding does not include decoy rounds. FY96 funds were congressionally reprogrammed for program acceleration. In keeping with Congressional intent, these kits were installed with FY96 funds. FY97 funds are for the kit proof kit which was awarded before the FY96 acceleration. One kit was acquired and installed on the test Aircraft using 3600 funds. P3I will provide improved version of launchers & controllers, and will replace the old version on a minimum of 15 aircraft beginning in FY01. Kit for 93rd aircraft procured with 3600 funds in support of Defensive System Upgrade Program (DSUP) EMD. Four kits were procured with FY99 3017 Supplemental funds (documented in this mod), but will be installed with 3010 BP11 funds. Prior to FY99, program funded within PE 0207442F.

Aircraft Breakdown: Active 77, Reserve 0, ANG 16

**Development Status**

Complete.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		29.7										
PROCUREMENT (3010)												
INSTALL KITS	24	19.9	24	14.3	19	10.2	13	7.8	12	7.2		
KITS NONRECUR		5.8		0.1								
EQUIPMENT	[24]	12.2	[24]	15.6	[19]	13.7	[23]	12.0	[17]	8.8		
EQUIP NONREC		0.7		0.6		0.3		0.4		0.3		0.2
CHANGE ORDERS		0.1		0.2		0.1		0.1		0.1		
DATA												
SIM/TRAINER		0.4		0.4		0.2		0.2				
SUPPORT-EQUIP		0.5										
CONT LIAB		0.2		0.3		0.0		0.0		0.0		0.0
PMA				0.3								
GFP				0.3								
FLIGHT TEST		0.1		0.9								
INSTALLATION OF HARDWARE												
FY-96	[7]	1.1	[4]	0.8								
FY-97	[1]	0.2										
FY-98					[8]	1.4						
FY-99			[4]	0.8	[9]	1.6			[5]	1.0		
FY-00									[11]	2.1		
FY-01									[3]	0.6	[10]	2.1
FY-02											[12]	0.4
TOTAL INSTALL	8	1.3	8	1.5	17	3.0	18	3.4	19	3.7	12	2.5
TOTAL COST (BP-1100)	24	41.2	24	34.3	19	27.4	13	23.8	12	20.2		2.7

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: B-1 MN-5013 RF TOWED DECOY SYSTEMS ALE-50  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								29.7
PROCUREMENT (3010)								
INSTALL KITS					92			59.4
KITS NONRECUR								5.9
EQUIPMENT					[107]			62.2
EQUIP NONREC								2.6
CHANGE ORDERS		0.1						0.6
DATA								
SIM/TRAINER								1.2
SUPPORT-EQUIP								0.5
CONT LIAB								0.8
PMA		0.1						0.3
GFP								1.0
FLIGHT TEST								
INSTALLATION OF HARDWARE								
FY-96 11 KITS					[11]			1.9
FY-97 1 KITS					[1]			0.2
FY-98 12 KITS					[12]			2.2
FY-99 24 KITS					[24]			4.4
FY-00 19 KITS					[19]			3.6
FY-01 13 KITS					[13]			2.6
FY-02 12 KITS	[10]	2.7			[12]			3.1
TOTAL INSTALL	10	2.7			92			18.1
TOTAL COST (BP-1100)		3.0			92			152.6
(Totals may not add due to rounding)								

Method of Implementation: DEPOT

Initial Lead Time: 16 Months

Follow-On Lead Time: 16 Months

Milestones

	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
Contract Date (Month/CY)	12/96	12/96	12/97	12/98	12/99	12/00	12/01			
Delivery Date (Month/CY)	04/98	04/98	04/99	04/00	04/01	04/02	04/03			

Installation Schedule

	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input			5	3	4	3	4	5	4	3
Output			1	2	4	1	4	3	5	3

**Installation Schedule Continued**

	FY-04				FY-05			
Quarters	1	2	3	4	1	2	3	4
Input	4	3	1	2				
Output	1	5	3	1	2			

UNCLASSIFIED

(Continued)

02/15/2000

FY 2001 PBR

Modification Title and No: SIMULATOR UPDATES MN-5047

Models of Aircraft Affected: B-1B

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-1

Center: ASC - Wright Patterson AFB, OH

PE 0101126F Team POWER

**Description/Justification**

This modification provides hardware and software updates to the training system to reflect the aircraft configuration. FY98 funds purchased a computational system upgrade to the Maintenance Training Equipment (MTE) and FY97 funds purchased a computational system upgrade to the Cockpit Procedures Trainer (CPT). These upgrades will expand memory and spare time in both devices to accommodate Block D upgrades. The FY00 through FY02 funds are for a computational system upgrade to the weapon system trainer (flight simulator) and the mission trainer. Without these upgrades, the trainers cannot be modified to reflect the conventional mission upgrades being accomplished on the aircraft. The quantities shown are not for purchase of simulators, but rather for updates being done to a variety of trainers/simulators already owned and maintained. The quantities pertain only to the number of different trainers being modified with each change, not the level of effort on each different trainer or even the consistency between the trainer modifications.

Aircraft Breakdown: Active 77, Reserve 0, ANG 16

**Development Status**

No development.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA		0.0										
SIM/TRAINER	[29]	26.6			[4]	5.7	[8]	5.5	[2]	2.7		
SUPPORT-EQUIP												
TOTAL COST (BP-1100)		26.6				5.7		5.5		2.7		
(Totals may not add due to rounding)												



UNCLASSIFIED

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
TOTAL COST (BP-1100)				40.5
(Totals may not add due to rounding)				

Method of Implementation: DEPOT FIELD TEAM  
 Initial Lead Time: 15 Months Follow-On Lead Time: 15 Months

**Milestones**

Contract Date (Month/CY)	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
	03/94	03/94	03/95	03/95	03/97	03/98	06/99	12/99	12/00	12/01
Delivery Date (Month/CY)	06/95	06/95	06/96		06/98	06/99		03/01	03/02	03/03

**Installation Schedule**

Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Input																				
Output																				
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Input																				
Output																				

02/15/2000

FY 2001 PBR

Modification Title and No: WIND CORRECTED MUNITIONS DISPENSER MN-5048

Models of Aircraft Affected: B-1B

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-1

PE 0101126F Team POWER

**Description/Justification**

Procures 50 Mil-Std 1760 module kits to integrate Wind Corrected Munitions Dispenser (WCMD). This gives the B-1B the capability to integrate WCMD on the B-1B enhanced conventional bomb module. This modification leverages previous Mil-Std 1760 development effort performed for CMUP Phase II JDAM integration. Modifies all 50 enhanced conventional bomb modules and will be known as the 1760 enhanced conventional bomb module (SECBM). This modification is managed with the avionics computer upgrade (MN-4252) [ie; Same contract, Same contractor, etc...]. The first 3 kits are procured with a lead time of 16 months. The follow-on lead time of 20 months refers to the lead time for the production contract which starts in FY02.

Aircraft Breakdown: Active 77, Reserve 0, ANG 16

**Development Status**  
EMD started in FY96.

**Projected Financial Plan**

RDT&E (3600)

PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST
22.7	14.1	15.0	10.8	4.0	

**PROCUREMENT (3010)**

	FY-00	FY-01	FY-02	FY-03
	QTY COST	QTY COST	QTY COST	QTY COST
INSTALL KITS				
KIT'S NONRECUR	3 2.5		32 18.1	15 8.9
EQUIPMENT	1.7			
EQUIP NONREC	0.2		1.1	0.8
CHANGE ORDERS	0.3	0.0	0.1	0.3
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
PMA				4.0
GFE	0.0		0.5	0.4

**INSTALLATION OF HARDWARE**

	FY-00	FY-01	FY-02	FY-03
	QTY COST	QTY COST	QTY COST	QTY COST
FY-00 3 KITS		[3] 0.1		
FY-02 32 KITS				
FY-03 15 KITS				
TOTAL INSTALL		3 0.1		

	FY-00	FY-01	FY-02	FY-03
	QTY COST	QTY COST	QTY COST	QTY COST
TOTAL COST (BP-1100)	3 4.8	0.1	32 19.8	15 14.6

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: B-1 MN-5048 WIND CORRECTED MUNITIONS DISPENSER

(Continued)

FY-04		FY-05		TO COMP		TOTAL	
QTY	COST	QTY	COST	QTY	COST	QTY	COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

PMA

GFE

INSTALLATION OF HARDWARE

FY-00 3 KITS

FY-02 32 KITS

FY-03 15 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 16 Months

Follow-On Lead Time: 20 Months

Milestones

Contract Date (Month/CY)

Delivery Date (Month/CY)

Installation Schedule

	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Quarters	1	2	3	4	1	2	3	4	1
Input									
Output									
FY-04									
Quarters	1	2	3	4	1	2	3	4	1
Input									
Output									

02/15/2000

FY 2001 PBR

Modification Title and No: F101 DIGITAL ENGINE CONTROL (DEC) MN-6039

Models of Aircraft Affected: B-1B

Center: OC-ALC - Tinker AFB Okla City, OK

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-1 Class P

PE 0101126F Team POWER

**Description/Justification**

The Digital Engine Control (DEC) replaces the existing analog augmentor fan temperature (AFT) control and central integrated test system (CITS) processor on the F101 Engine. The DEC includes drop-in replacement boards, built-in diagnostics and reprogram ability. It is interchangeable with the existing equipment physically replacing the AFT control and relegating the CITS processor to a pass-through function. Kits will be installed as an organizational level modification. Program modifies the entire B-1 engine pool of 441 engines.

Aircraft Breakdown: Active 77, Reserve 0, ANG 16

**Development Status**

N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
SOFTWARE												
MOD OF SPARES												
TOTAL COST (BP-1100)												
(Totals may not add due to rounding)												

UNCLASSIFIED

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
SOFTWARE								
MOD OF SPARES								
TOTAL COST (BP-1100)		5.2		0.6				28.6
(Totals may not add due to rounding)								

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

Contract Date (Month/CY)	FY-01	FY-02	FY-03	FY-04	FY-05
07/01	11/01	11/02	11/03	11/04	11/05
Delivery Date (Month/CY)	07/02	11/02	11/03	11/04	11/05

02/15/2000

FY 2001 PBR

Modification Title and No: LINK 16 MN-8421

Models of Aircraft Affected: B-1B

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: B-1

PE 0101126F Team POWER

Description/Justification

This upgrade provides for five shipsets of Datalink equipment with line of sight and beyond line of sight data link capability. The data links will provide real time situational awareness to the aircrew and the capability to relay command and control information to include target changes to the B-1B while enroute to the target area. The line of sight data link will be Link 16 with the beyond line of sight (BLOS) link provided by UHF SATCOM. Concept for this data link capability was demonstrated on the B-1B during EFX-98, and BLOS capability was utilized on B-1s in Operation Allied Force.

Aircraft Breakdown: Active 77, Reserve 0, ANG 16

Development Status

Complete.

Projected Financial Plan

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KIT'S NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
				5	0.1						
				[5]	0.1						
					5.4						
					4.3						
					1.5						
					0.8						
					0.5						
				5	12.8						

(Continued)

UNCLASSIFIED

Fact Sheet: B-1 MN-8421 LINK 16  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					5	0.1		
KITS NONRECUR						0.1		
EQUIPMENT					[5]	5.4		
EQUIP NONREC						4.3		
CHANGE ORDERS						1.5		
DATA						0.8		
SIM/TRAINER								
SUPPORT-EQUIP						0.5		
TOTAL COST (BP-1100)					5	12.8		

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 21 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-00  
Contract Date (Month/CY) 03/00  
Delivery Date (Month/CY) 12/01

02/15/2000

FY 2001 PBR

Modification Title and No: FM IMMUNITY MN-DC101

Models of Aircraft Affected: B-1B

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-1 Class P

PE 0101126F Team POWER

**Description/Justification**

This modification provides for the upgrade of the B-1 instrument landing system (ILS) on 16 B-1 aircraft to avoid potential safety of flight interference from FM bands. The requirement for this modification is driven by International Civil Aviation Organization (ICAO) agreements that allow FM band broadcasts to be transmitted at higher power levels at frequencies near the ILS receivers. Modification must be incorporated in aircraft operating or expected to operate in Europe.

Aircraft Breakdown: Active 77, Reserve 0, ANG 16

**Development Status**

Complete.

**Projected Financial Plan**

RDTE&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

PRIOR	FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					16	0.5				
						0.4				
						0.5				
<hr/>										
	16									1.4



(Continued)

UNCLASSIFIED

Fact Sheet: B-1 MN-DC101 FM IMMUNITY  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR				16
EQUIPMENT				0.5
EQUIP NONREC				0.4
CHANGE ORDERS				
DATA				0.5
SIM/TRAINER				
SUPPORT-EQUIP				
TOTAL COST (BP-1100)			16	1.4

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 8 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-01  
Contract Date (Month/CY) 11/00  
Delivery Date (Month/CY) 07/01

02/15/2000

FY 2001 PBR

Modification Title and No: LANCER 101E MN-T4251E

Models of Aircraft Affected: B-1B

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-1 Class P

PE 0101126F Team POWER

Description/Justification

This mod incorporates the newly developed ruggedized fan blade upgrade. Kits will be installed under the engine overhaul program on engines cycling through depot within the required time-frame. Installation of other kits will be at organizational level.

Aircraft Breakdown: Active 77, Reserve 0, ANG 16

Development Status

N/A

Projected Financial Plan

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)						
PROCUREMENT (3010)						
INSTALL KITS	296	22.0	164	10.0		
KIT'S NONRECUR						
EQUIPMENT						
EQUIP NONREC						
CHANGE ORDERS		0.0				
DATA						
SIM/TRAINER						
SUPPORT-EQUIP		0.0	0.0			
OGC						
TOTAL COST (BP-1100)	296	22.0	164	10.0		

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: B-1 MN-T4251E LANCER 101E  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					460		460	31.9
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.0
SIM/TRAINER								
SUPPORT-EQUIP								
OGC								0.0
TOTAL COST (BP-1100)					460		460	32.0

(Totals may not add due to rounding)

Method of Implementation: DEPOT OVERHAUL

Initial Lead Time: 6 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-97	FY-98	FY-99
Contract Date (Month/CY)	12/96	12/97	05/99
Delivery Date (Month/CY)	06/97	12/98	05/00

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)				DATE February 2000				
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications				P-1 ITEM NOMENCLATURE: B-52				
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005	
	\$47.519	\$24.580	\$8.425	\$19.701	\$35.210	\$34.077	\$31.880	

This line item funds modifications to the B-52H aircraft. The B-52H strategic bomber maintains nuclear and conventional taskings. The overall goal of the modifications budgeted in FY01 is to conventionally enhance B-52H aircraft to replace the retired conventionally tasked B-52G aircraft. The primary modification budgeted in FY01 is the ARC-210 Radio. The specific modifications budgeted and programmed are below.

MOD CLASS NR P	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
3150	NAVSTAR GLOBAL POS	3.8								35.3
3194	SITUATION AWARENES				17.5	29.0	18.0	17.0		81.5
3263	INTEGRATED CONV ST	9.6	2.6							83.4
3264	ELECTRO-OPTICAL VIE	5.4	3.3	1.4						14.8
3308	VINSON			0.8	0.5					3.8
4222	ARC-210 RADIO	0.8	0.1	5.2	1.5					28.9
4260	ADVANCED WEAPON I	0.7	0.5	1.0	0.3					12.9
4270	ECM IMPROVEMENT	4.8	12.8			6.0	1.5			26.9
4371	GPS TACAN	22.0	3.7							41.3
4693	AVIONICS MIDLIFE IMP						14.5	14.9		29.4
99999X	LOW COST MODIFICATI	0.2	0.1	0.1		0.2	0.1			1.5
Z88888	REPROGRAMMINGS	0.2	1.5							1.7
TOTAL FOR CLASS P		47.5	24.6	8.4	19.7	35.2	34.1	31.9	0.0	361.3
TOTAL FOR AIRCRAFT B-52		47.5	24.6	8.4	19.7	35.2	34.1	31.9	0.0	361.3

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 30	PAGE NO. 1
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02/15/2000

FY 2001 PBR

Modification Title and No: NAVSTAR GLOBAL POSITIONING SYSTEM MN-3150

Models of Aircraft Affected: B-52H

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-52

PE 0101113F Team POWER

**Description/Justification**

Congressionally directed program, Navstar GPS provides worldwide three-dimensional positioning/navigation and precise weapons delivery for military aircraft. The first 10 kits were capitalized from the B-52G GPS modification effort. Additionally, GPS LRUs were removed from the retiring G models, refurbished and installed on the H models. This supported the modification of 40 B-52H aircraft. FY99 Kit Production Leadtime is 9 months. Method of installation accomplished at Contractor Facility and Depot. Program complies with congressional mandate to modify 'Attrition Reserve' aircraft. Program approved by HQ USAF to use FY97 funding, that was on withhold, for FY98 installations, also FY99 funding for FY00 installations. Utilized for weapons delivery GPS is baselined with the Integrated Conventional Stores Management System (ICSMS/MN-3263) and AGM-142 missile currently being added to the B-52.

Aircraft Breakdown: Active 73, Reserve 9, ANG 0

**Development Status**

N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	77	9.2	5	1.0								
KITS NONREC		3.9										
EQUIPMENT	[77]	5.4	[5]	1.2								
EQUIP NONREC												
CHANGE ORDERS		2.9										
DATA		2.7										
SIM/TRAINER	[6]	1.0										
SUPPORT-EQUIP		1.1										
INSTALLATION OF HARDWARE												
FY-92 24 KITS	[24]	2.0										
FY-94 34 KITS	[34]	3.2										
FY-95 8 KITS	[2]	0.2	[6]	0.5								
FY-97 8 KITS			[8]	0.6								
FY-98 3 KITS			[3]	0.2								
FY-99 5 KITS			[5]	0.3								
TOTAL INSTALL	60	5.3	22	1.6								
TOTAL COST (BP-1100)	77	31.5	5	3.8								

(Totals may not add due to rounding)

## UNCLASSIFIED

Fact Sheet: B-52 MN-3150 NAVSTAR GLOBAL POSITIONING SYSTEM  
(Continued)

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			82	10.2
KITS NONRECUR				3.9
EQUIPMENT			[82]	6.6
EQUIP NONREC				2.9
CHANGE ORDERS				2.7
DATA			[6]	1.0
SIM/TRAINER				1.1
SUPPORT-EQUIP				
INSTALLATION OF HARDWARE				
FY-92 24 KITS			[24]	2.0
FY-94 34 KITS			[34]	3.2
FY-95 8 KITS			[8]	0.7
FY-97 8 KITS			[8]	0.6
FY-98 3 KITS			[3]	0.2
FY-99 5 KITS			[5]	0.3
TOTAL INSTALL			82	6.9
TOTAL COST (BP-1100)			82	35.3

(Totals may not add due to rounding)

Method of Implementation: COMBINATION

Initial Lead Time: 3 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
Contract Date (Month/CY)	12/91		03/94	03/95		12/97	12/97	12/98	
Delivery Date (Month/CY)	03/92		03/95	03/96		12/98	12/98	12/99	

**Installation Schedule**

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	8 8 8								
Output	8 8 8	8	8	7	8	7	1	3	4
Quarters	1 2 3 4								
Input	3								
Output	3	3							

02/15/2000

FY 2001 PBR

Modification Title and No: INTEGRATED CONV STORES MGMT SYS MN-3263

Models of Aircraft Affected: B-52H

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-52 Class P

PE 0101113F Team POWER

**Description/Justification**

This program provides a conventional stores management system using Military Standard 1760 specifications. The system is integrated into the offensive avionics system software and will enable the B-52 to carry, program, and launch new Military Standard 1760 conventional weapons. FY99 Change Orders are to modify existing Group B hardware to meet advanced weapons specifications. This modification is baselined to the NAVSTAR GPS (MN-3150), HAVE NAP (MN-3375A), Harpoon (MN-4258), and Advanced Weapon Integration (MN-4260) modifications.

Aircraft Breakdown: Active 73, Reserve 9, ANG 0

**Development Status**

N/A

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

	PRIOR QTY	FY-99 COST	FY-99 QTY	FY-00 COST	FY-00 QTY	FY-01 COST	FY-01 QTY	FY-02 COST	FY-02 QTY	FY-03 COST	FY-03 QTY
INSTALL KITS	79	18.2	3	0.8							
KITS NONRECUR		8.5									
EQUIPMENT	[79]	8.7	[3]	0.4							
EQUIP NONREC											
CHANGE ORDERS		0.8		1.0							
DATA		3.8									
SIM/TRAINER	[6]	4.0		2.4		0.1					
SUPPORT-EQUIP		17.2									
OAPT		0.2									
ECP (PYLONS)	[13]	0.3		3.0							
OGC		0.0		0.1		0.0					
INSTALLATION OF HARDWARE											
FY-93 9 KITS	[9]	3.5									
FY-94 38 KITS	[38]	5.2									
FY-95 19 KITS	[7]	0.7	[11]	2.0	[1]	0.2					
FY-97 13 KITS					[13]	1.9					
FY-99 3 KITS					[3]	0.4					
TOTAL INSTALL	54	9.4	11	2.0	17	2.5					

TOTAL COST (BP-1100)

79 71.2 3 9.6 2.6

(Totals may not add due to rounding)



UNCLASSIFIED

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			82	19.0
KITS NONRECUR				8.5
EQUIPMENT			[82]	9.0
EQUIP NONREC				1.8
CHANGE ORDERS				3.8
DATA				4.0
SIM/TRAINER			[6]	19.7
SUPPORT-EQUIP				0.2
OAPT			[13]	3.3
ECP (PYLONS)				0.1
OGC				
INSTALLATION OF HARDWARE				
FY-93 9 KITS			[9]	3.5
FY-94 38 KITS			[38]	5.2
FY-95 19 KITS			[19]	2.8
FY-97 13 KITS			[13]	1.9
FY-99 3 KITS			[3]	0.4
TOTAL INSTALL			82	13.9
TOTAL COST (BP-1100)			82	83.4

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	12/92	03/94	03/95	03/95	03/98	03/98				
Delivery Date (Month/CY)	06/93	09/94	09/95	09/95	09/98	09/98				

**Installation Schedule**

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-99
Quarters 1	2	3	4	1	2	3	4	1	2	3	4
Input											
Output											
Quarters 1	2	3	4	1	2	3	4	1	2	3	4
Input	4	4	5								
Output	4	4	4	5							

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PE 0101113F Team POWER

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
<b>RDT&amp;E (3600)</b>												
<b>PROCUREMENT (3010)</b>												
INSTALL KITS	29	0.6	30	0.6	21	0.4	9	0.2				
KITS NONRECUR												
EQUIPMENT	[29]	4.1	[30]	4.2	[21]	2.9	[9]	1.2				
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER			[3]	0.3								
SUPPORT-EQUIP				0.2								
OGC		0.0		0.0		0.0		0.0				
<b>TOTAL COST (BP-1100)</b>	<b>29</b>	<b>4.7</b>	<b>30</b>	<b>5.4</b>	<b>21</b>	<b>3.3</b>	<b>9</b>	<b>1.4</b>				
(Totals may not add due to rounding)												

UNCLASSIFIED

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							89	1.8
KITS NONRECUR								
EQUIPMENT							[89]	12.3
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER							[3]	0.3
SUPPORT-EQUIP								0.2
OGC								0.1
TOTAL COST (BP-1100)							89	14.8

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 8 Months

Follow-On Lead Time: 8 Months

**Milestones**

Contract Date (Month/CY)	<u>FY-97</u>	<u>FY-98</u>	<u>FY-99</u>	<u>FY-00</u>	<u>FY-01</u>
Delivery Date (Month/CY)			07/99	07/00	04/01
			03/00	03/01	12/01

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: ARC-210 RADIO MN-4222  
 Models of Aircraft Affected: B-52H

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: B-52  
 PE 0101113F Team POWER

Center: OC-ALC - Tinker AFB Okla City, OK

**Description/Justification**  
 Provides multipurpose radios for B-52H. Greatly improves frequency coverage and electronic countermeasures communications capability and improved flexibility and interoperability with other services, air traffic control centers, and allied forces. Will provide UHF/VHF voice AFSATCOM/maritime/HAVE QUICK capability. Demand Assigned Multiple Access (DAMA) retrofit kits are being procured to modify Group B. DAMA retrofit method of installation is CFT. FY99 OGC will be used for DAMA training. Program approved by HQ USAF to use FY98 funding, that was on withhold, for FY99 installations. FY 98 funding was not received until FY99, therefore, installations will actually occur in FY00. Program complies with congressional mandate to modify 'Attrition Reserve' aircraft. This modification is baselined to VINSON (MN# 3308). Program not executable in FY01 and FY02 if funding cuts are not replaced. Funding cuts reduce the amount of installations in FY02 to 15 aircraft.

Aircraft Breakdown: Active 85, Reserve 9, ANG 0

**Development Status**  
 N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	65	3.4					29	2.5				
KITS NONRECUR												
EQUIPMENT	[65]	6.2					[29]	2.7				
EQUIP NONREC												
CHANGE ORDERS		1.0										
DATA		0.4										
SIM/TRAINER	[4]	1.6	[1]	0.4								
SUPPORT-EQUIP												
DAMA EQUIP	[47]	4.5										
DAMA INSTALL	[47]	0.6										
OGC		0.6						0.1				
INTEGRATION		0.3										
INSTALLATION OF HARDWARE												
FY-92 11 KITS	[11]	0.3										
FY-93 36 KITS	[36]	1.3										
FY-98 18 KITS	[18]	1.0										
FY-01 29 KITS									[15]	1.5		
TOTAL INSTALL	65	2.6							15	1.5		
TOTAL COST (BP-1100)	65	21.3		0.8			0.1	29	5.2		1.5	

(Totals may not add due to rounding)

UNCLASSIFIED

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			94	5.9
KITS NONRECUR			[94]	8.9
EQUIPMENT				1.0
EQUIP NONREC				0.4
CHANGE ORDERS			[5]	2.0
DATA				4.5
SIM/TRAINER			[47]	0.6
SUPPORT-EQUIP			[47]	1.1
DAMA EQUIP				0.3
DAMA INSTALL				
OGC				
INTEGRATION				
INSTALLATION OF HARDWARE				
FY-92 11 KITS			[11]	0.3
FY-93 36 KITS			[36]	1.3
FY-98 18 KITS			[18]	1.0
FY-01 29 KITS			[15]	1.5
TOTAL INSTALL			80	4.1
TOTAL COST (BP-1100)			94	28.9

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 9 Months

Follow-On Lead Time: 9 Months

#### Milestones

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)	12/91	12/92						03/99		03/01		
Delivery Date (Month/CY)	09/92	09/93						12/99		12/01		

#### Installation Schedule

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-99
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1
Input				11				36					2
Output													3
													4
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1
Input				9				8					2
Output													3
													4

02/15/2000

FY 2001 PBR

Modification Title and No: ADVANCED WEAPON INTEGRATION MN-4260

Models of Aircraft Affected: B-52H

## UNCLASSIFIED

## MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: B-52

PE 010113F Team POWER

**Description/Justification**

Modification integrates near-precision MIL-STD 1760 weapons onto the B-52H to include the Joint Direct Attack Munition (JDAM), Wind Corrected Munition Dispenser (WCMD), Joint Standoff Weapon (JSOW), and the Joint Air-to-Surface Stand-off Missile (JASSM). The modification provides operational flight program software updates by delivering Stores Management Overlays (SMO) for weapon control and delivery, and provides umbilicals and umbilical retention hardware. Fifty-four (54) shipsets of production hardware will be procured and delivered to install on the Stub Pylon/Heavy Stores Adapter Beam (SP/HSAB). This modification is based on ICSMS (MN 3150). ICSMS provided modification of SP/HSABs; therefore, no Group A procurement is required. Phase I of EMD provided design of hardware. Hardware production is not related to FY98/FY99 RDT&E funding. Software design in Phase II of EMD (FY98 - FY00) does not influence or relate to production hardware (hardware physically/mechanically common to weapons).

Aircraft Breakdown: Active 50, Reserve 4, ANG 0

**Development Status**

Development is in two phases. Phase I develops umbilicals (JAW MIL-STD-1760) and umbilical retention hardware for carriage and release of JDAM, WCMD, JSOW and JASSM. Hardware design is complete and proven compatible with all Advance Weapons. Phase I also develops SMOs and provides system level testing for JDAM and WCMD. JDAM development is complete for B-52. WCMD DT&E will restart in 4Q/FY99 with completion in 1Q/FY00. IOT&E will be 2Q-3Q FY00. Phase II develops SMOs and provides system level testing for JSOW and JASSM. Ground/flight testing for JSOW is 2Q/FY99 - 1Q/FY00. Ground/flight testing for JASSM begins 2Q/FY00.

**Projected Financial Plan**

	PRIOR	FY-99		FY-00		FY-01		FY-02		FY-03	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)			6.1		3.4						
PROCUREMENT (3010)											
INSTALL KITS											
KITS NONRECUR											
EQUIPMENT	[54]	9.6									
EQUIP NONREC		0.1									
CHANGE ORDERS											
DATA		0.4	0.2		0.1		0.9		0.1		
SIM/TRAINER		0.2	0.5	[5]	0.2						
SUPPORT-EQUIP											
OGC		0.1	0.0		0.2		0.0		0.1		
TOTAL COST (BP-1100)		10.5	0.7		0.5		1.0		0.3		
(Totals may not add due to rounding)											

(Continued)

UNCLASSIFIED

Fact Sheet: B-52 MN-4260 ADVANCED WEAPON INTEGRATION  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								9.5
PROCUREMENT (3010)								
INSTALL KITS								
KIT'S NONRECUR					[54]			9.6
EQUIPMENT								0.1
EQUIP NONREC								
CHANGE ORDERS								
DATA								1.8
SIM/TRAINER					[5]			0.9
SUPPORT-EQUIP								
OGC								0.5
TOTAL COST (BP-1100)								12.9

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	<u>FY-96</u>	<u>FY-97</u>	<u>FY-98</u>
Contract Date (Month/CY)	06/97	06/98	06/98
Delivery Date (Month/CY)	06/98	06/99	

02/15/2000

FY 2001 PBR

Modification Title and No: ECM IMPROVEMENT MN-4270

Models of Aircraft Affected: B-52H

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: B-52

Center: OC-ALC - Tinker AFB Okla City, OK

PE 0101113F Team POWER

# Description/Justification

The ALQ-172 enhancement is an improvement to two of the common core Line Replaceable Units (LRUs). New circuit card with erasable proms and gate array modules are incorporated. Memory is increased approximately 400% and Mean-Time-Between-Failure (MTBF) is increased. This upgrade adds a new Control Display Unit (CDU) to enhance operator and maintenance capabilities. First aircraft modification was done with RDT&E funding. This program was terminated after EMD due to HQ USAF direction. FY03/FY04 funding includes 5 AR aircraft.

Aircraft Breakdown: Active 7, Reserve 0, ANG 0

## Development Status

Complete

## Projected Financial Plan

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	QTY	QTY	QTY	QTY	QTY
	COST	COST	COST	COST	COST	COST
RDT&E (3600)	[1] 5.2					
PROCUREMENT (3010)						
INSTALL KITS	0.4	0.5	3	2.1		4
KITS NONRECUR						
EQUIPMENT	1.0	1.0	[3]	5.6		[4]
EQUIP NONREC						
CHANGE ORDERS						2.1
DATA						
SIM/TRAINER						
SUPPORT-EQUIP						
OGC	0.4	0.9		1.1		0.7
FLIGHT TEST		2.4				
INSTALL						
*** See Remarks ***				4.0		
TOTAL COST (BP-1100)	1.8	4.8	3	12.8		4
(Totals may not add due to rounding)						6.0



(Continued)

UNCLASSIFIED

Fact Sheet: B-52 MN-4270 ECM IMPROVEMENT  
(Continued)

	FY-04		FY-05		TO COMP		FY-05		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)							[1]	5.2		
PROCUREMENT (3010)										
INSTALL KITS							7	3.6		
KITS NONRECUR										
EQUIPMENT							[7]	10.2		
EQUIP NONREC										
CHANGE ORDERS		0.3						2.4		
DATA										
SIM/TRAINER										
SUPPORT-EQUIP										
OGC		0.6						3.7		
FLIGHT TEST								2.4		
INSTALL	[4]	0.6					[4]	0.6		
*** See Remarks ***								4.0		
TOTAL COST (BP-1100)		1.5					7	26.9		

(Totals may not add due to rounding)

Method of Implementation:

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

**Milestones**

Contract Date (Month/CY)  
Delivery Date (Month/CY)

FY-05

FY-04

FY-03

FY-02

FY-01

FY-00

FY-99

FY-98

FY-97

FY-96

02/15/2000

FY 2001 PBR

Modification Title and No: GPS TACAN MN-4371

Models of Aircraft Affected: B-52H

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: B-52 Class P

PE 0101113F Team POWER

**Description/Justification**

GPS TACAN Replacement System (TRS) includes the installation of controls and displays, for situational awareness at the pilot/co-pilot stations. Includes a new Signal Data Converter (SDC) and Digital Data Loader (DDL) to interface with the current on board GPS system and a Crypto-Fill Port for electronic keying. Method of installation accomplished by Contractor Field Team and Depot. FY98 accelerated trial installation for AFMC aircraft. TRS incorporates the redesign of the GPS Group B Interface Unit (IU) in support of the 24 additional aircraft directed for GPS integration. The current IU has become unsupportable due to obsolete parts. The new Interface Unit will provide TACAN Emulation, AGM-142 capability, and support the current efforts of the Advance Weapons Integration Program (AWIP). This capability will be extended to the additional 35 aircraft and includes retrofit of the current (47) GPS capable aircraft. This modification is baselined with the GPS MOD (MN/3150) and ICSMS (MN/3263).

Aircraft Breakdown: Active 73, Reserve 9, ANG 0

**Development Status**

COMPLETE

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		8.7										
PROCUREMENT (3010)												
INSTALL KITS	42	4.9	35	2.6	5	0.1						
KIT'S NONREC												
EQUIPMENT	[42]	10.1	[35]	8.1	[5]	0.5						
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER			[6]	6.2								
SUPPORT-EQUIP				2.0								
INSTALLATION OF HARDWARE												
FY-97 9 KITS	[1]	0.6	[8]	0.7								
FY-98 33 KITS			[29]	2.5	[4]	0.3						
FY-99 35 KITS					[35]	2.5						
FY-00 5 KITS					[5]	0.3						
TOTAL INSTALL	1	0.6	37	3.2	44	3.1						
TOTAL COST (BP-1100)	42	15.6	35	22.0	5	3.7						

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: B-52 MN-4371 GPS TACAN  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				8.7
PROCUREMENT (3010)				
INSTALL KITS			82	7.5
KITS NONRECUR				
EQUIPMENT			[82]	18.6
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER			[6]	6.2
SUPPORT-EQUIP				2.0
INSTALLATION OF HARDWARE				
FY-97 9 KITS			[9]	1.3
FY-98 33 KITS			[33]	2.8
FY-99 35 KITS			[35]	2.5
FY-00 5 KITS			[5]	0.3
TOTAL INSTALL			82	6.9
TOTAL COST (BP-1100)			82	41.3

(Totals may not add due to rounding)

Method of Implementation: COMBINATION

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

Milestones

	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	03/97	12/97	12/98	12/99	12/00	
Delivery Date (Month/CY)	03/98	12/98	12/99	12/00		

Installation Schedule

	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input						
Output						

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications				P-1 ITEM NOMENCLATURE: F-117			
	1999	2000	2001	2002	2003	2004	2005
<b>COST (In Mil)</b>	\$28.488	\$37.201	\$32.005	\$27.397	\$21.215	\$8.255	\$0.759

This line item funds modifications to the F-117A aircraft. The F-117A is a twin engine, single seat fighter incorporating low-observable "stealth" technology, enabling it to penetrate enemy air defenses and strike high-value targets with precision munitions. The primary modification budgeted in FY01 is the Single Configuration Fleet program to standardize the radar absorbing material (RAM) for the entire fleet. Other modifications are budgeted to enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

CLASS P	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
11326	AP-102	COMPUTER ME	0.2								23.5
11331	STORES	MANAGEMENT		2.6	5.0	5.4	4.4				17.4
11333	ENHANCED	GBU-27 AC	3.9								3.9
3150	NAVSTAR	GLOBAL POS	9.6	0.1							46.9
31904	STEEL	COMPRESSOR	0.2	0.1							0.6
31927	OMNIBUS	ENGINE MOD	0.1	0.4	3.2	0.8	0.3				6.8
31937	SINGLE	CONFIGURATI	11.5	19.2	20.6	20.7	16.1	8.1			96.2
31968	ENGINE	ELECTRONIC	0.5		0.3						1.5
31970	WST	HOST COMPUTER		3.5							3.5
31971	AFMSS	HARDWARE UP		4.5							4.5
6846	AIRCRAFT	825		3.0							3.0
99999S	SERVICE	BULLETTINS	2.2	1.7	1.2	0.5	0.5	0.1	0.8		16.8
99999X	LOW	COST MODIFICATI	0.2	0.1	0.1	0.1	0.1	0.1	0.1	1.6	10.8
DC101	FM	IMMUNITY			1.6						1.6
Z88888	REPROGRAMMING		0.1	2.3							2.3
TOTAL FOR CLASS P			28.6	37.3	32.1	27.5	21.3	8.4	0.9	1.6	239.1

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 31	PAGE NO. 1
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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: F-117				
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005
	\$28.488	\$37.201	\$32.005	\$27.397	\$21.215	\$8.255	\$0.759

This line item funds modifications to the F-117A aircraft. The F-117A is a twin engine, single seat fighter incorporating low-observable "stealth" technology, enabling it to penetrate enemy air defenses and strike high-value targets with precision munitions. The primary modification budgeted in FY01 is the Single Configuration Fleet program to standardize the radar absorbing material (RAM) for the entire fleet. Other modifications are budgeted to enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

CLASS	MOD	MODIFICATION	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST	TOTAL
NR		TITLE								IO GO	PROG.
			28.6	37.3	32.1	27.5	21.3	8.4	0.9	1.6	239.1
TOTAL FOR AIRCRAFT F-117											

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 31	PAGE NO. 2
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02/15/2000

FY 2001 PBR

Modification Title and No: STORES MANAGEMENT PROCESSOR UPGRADE (MIL-STD-1760) MN-11331

Models of Aircraft Affected: F-117A

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-117

PE 0207141F Team POWER

#### Description/Justification

The Stores Management Processor (SMP) is the interface between the aircraft and the weapon. The SMP currently communicates with the weapons via a MIL-STD-1553 interface. Planned conventional weapons require a MIL-STD-1760 compliant, logical electrical and mechanical interface with the aircraft. This modification provides the SMP with a MIL-STD-1760 interface capability and allows future interface and utilization of Joint Direct Attack Munitions, Wind Corrected Munition Dispenser and Enhanced GBU-27 while maintaining current capabilities. The F-117A SMP must undergo hardware and software modifications to incorporate this MIL-STD-1760 interface.

Aircraft Breakdown: Active 53, Reserve 0, ANG 0

#### Development Status

The SMP is in the final stages of EMD and is currently undergoing testing. First Flyable unit delivered April 99. Contractor FQT completed June 99. Reliability testing is in process and currently is 50% complete (Jan 00). Production Readiness Review was held 1 Dec 99. Flight testing began Dec 99. Development effort completed in FY00/2, with production beginning in FY00/3.

#### Projected Financial Plan

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)	2	11.2		4.6		2.2						
PROCUREMENT (3010)												
INSTALL KITS							18	4.0	18	3.6	15	2.6
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER					[1]	0.6	[1]	0.1				
SUPPORT-EQUIP							[2]	0.2	[2]	0.2	[3]	0.3
MOD OF SPARES							[3]	0.7	[8]	1.6	[8]	1.4
TOTAL COST (BP-1100)	2				2.6		18	5.0	18	5.4	15	4.4

(Totals may not add due to rounding)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)							2	18.0
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								2.0
EQUIPMENT					51	10.2		
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER					[2]	0.7		
SUPPORT-EQUIP					[7]	0.8		
MOD OF SPARES					[19]	3.7		
TOTAL COST (BP-1100)					53	17.4		

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 16 Months

Follow-On Lead Time: 16 Months

**Milestones**

Contract Date (Month/CY)	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
Delivery Date (Month/CY)						12/00	10/01	10/02
						04/02	02/03	02/04



02/15/2000

FY 2001 PBR

Modification Title and No: ENHANCED GBU-27 ACCELERATION MN-11333

Models of Aircraft Affected: F-117A

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-117

PE 0207141F Team POWER

**Description/Justification**

This effort was funded by Congress in the FY99 Operational Rapid Response Supplemental. The effort provides for the delivery of a precision weapon through integration of a 1760 interface to provide power and GPS data providing position information. This modification does not allow coordinates to be changed in flight and does not include Pilot Vehicle Interface, Mission Planning, or Weapon System Trainer Integration. The enhanced capability provided by this modification will decrease the number of ineffective sorties due to weather constraints.

In response to HQ USAF/CC Combat Mission Need Statement (CMNS 99-14), this project provides temporary hardware modification kits of weapon ready indicator and a jumper harness. In addition, this effort provides weapon ready harness and umbilical. The combination of these deliverables will provide an interim and limited, power-only mode to twenty-four (24) F-117A aircraft. This limited capability is compatible with current aircraft configurations and may be installed, removed and re-installed on any F-117A aircraft to support current operations.

This effort also includes a limited software integration to insure EGBU-27 compatibility with new (Dash 14) Stores Management Processor (SMP) upgrades. The result is an EGBU-27 combat capability that lasts until Smart Weapons upgrades are implemented in FY06.

Aircraft Breakdown: Active 53, Reserve 0, ANG 0

**Development Status**

The Enhanced GBU-27 laser guided bomb development and procurement is managed by OO-ALC/LIW. This document only addresses a limited capability integration and test of the EGBU-27 with the F-117A aircraft using the dash 14 SMP.

F-117A contractor is engineering and testing initial designs for hardware kits, harnesses and umbilicals.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)						3.7						
PROCUREMENT (3010)												
INSTALL KITS			24			3.9						
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
TOTAL COST (BP-1100)			24			3.9						

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-117 MN-11333 ENHANCED GBU-27 ACCELERATION  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								3.7
PROCUREMENT (3010)								
INSTALL KITS					24		24	3.9
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
TOTAL COST (BP-1100)					24		24	3.9
(Totals may not add due to rounding)								

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 7 Months

Follow-On Lead Time: 0 Months

Milestones

Contract Date (Month/CY)	FY-99	FY-00
Delivery Date (Month/CY)	12/99	07/00

02/15/2000

FY 2001 PBR

Modification Title and No: NAVSTAR GLOBAL POSITIONING SYSTEM MN-3150

Models of Aircraft Affected: F-117A

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: F-117

PE 0207141F Team POWER

**Description/Justification**

Funds the continuation of efforts initiated in APPN 3010/BP1900. FY92-95 BP1900 funding is shown for information only. GPS provides world-wide three dimensional positioning/navigation. GPS has three segments; user equipment, satellites and control network. Satellites broadcast high-accuracy data signals which are received by user equipment and used to compute platform positioning/velocity and provide steering vectors to target locations. Control segment daily updates the navigation messages broadcast from the satellites. GPS is a driver modification in FY97-99 and the modification/induction and checkout processing charges are funded by this modification in FY97-99. Aircraft lost during Sep 97 air show not modified. Kit buy affected by lost aircraft already negotiated - changing quantity would add cost.

Aircraft Breakdown: Active 54, Reserve 0, ANG 0

**Development Status**

Complete.

**Projected Financial Plan**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST
RDTE&E (3600)		48.8				
PROCUREMENT (3010)						
INSTALL KITS	[52]	19.8				
KITS NONRECUR	[3]	25.4				
EQUIPMENT	52	4.7				
EQUIP NONREC	3	6.0				
CHANGE ORDERS						
DATA		4.0				
SIM/TRAINER	[4]	4.0				
SUPPORT-EQUIP		0.7				
MOD		10.6	6.4			
INDUCTION/CHECKOUT						
FLIGHT TEST		9.5				
BP1900 FUNDS		-56.1				
MOD OF SPARES	[115]	0.7	[16]	0.1		
INSTALLATION OF HARDWARE						
FY-94 2 KITS	[2]	0.0				
FY-95 20 KITS	[20]	4.1				
FY-96 19 KITS	[17]	3.7				
FY-97 9 KITS			[2]	0.5		
FY-98 5 KITS			[9]	2.1		
			[4]	0.7		
TOTAL INSTALL	39	7.8	15	3.2		
TOTAL COST (BP-1100)	55	37.2	9.6		0.1	

(Totals may not add due to rounding)

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	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				48.8
PROCUREMENT (3010)				
INSTALL KITS			[52]	19.8
KITS NONRECUR			[3]	25.4
EQUIPMENT			52	4.7
EQUIP NONREC			3	6.0
CHANGE ORDERS				
DATA				4.0
SIM/TRAINER			[4]	4.0
SUPPORT-EQUIP				0.7
MOD				17.0
INDUCTION/CHECKOUT				9.5
FLIGHT TEST				-56.1
BP1900 FUNDS				0.8
MOD OF SPARES			[131]	
INSTALLATION OF HARDWARE				
FY-94 2 KITS			[2]	0.0
FY-95 20 KITS			[20]	4.1
FY-96 19 KITS			[19]	4.2
FY-97 9 KITS			[9]	2.1
FY-98 5 KITS			[4]	0.7
TOTAL INSTALL			54	11.0
TOTAL COST (BP-1100)			55	46.9

(Totals may not add due to rounding)

Method of Implementation: CLS

Initial Lead Time: 12 Months Follow-On Lead Time: 18 Months

**Milestones**

Contract Date (Month/CY)  
Delivery Date (Month/CY)

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
	10/93	10/94	01/95	01/96	01/97	01/98	01/99		

**Installation Schedule**

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99
Quarters	1	2	3	4	1	2	3	4
Input								
Output								
Quarters	1	2	3	4	1	2	3	4
Input								
Output								

UNCLASSIFIED

02/15/2000

FY 2001 PBR

Modification Title and No: OMNIBUS ENGINE MODIFICATIONS MN-31927

Models of Aircraft Affected: F-117A

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-117

PE 0207141F Team POWER

**Description/Justification**

F-117A engines were procured through the Navy and are modified at the Navy depot in conjunction with their engine program. This mod includes miscellaneous small modifications to increase engine life and reduce maintenance requirements. These changes include main fuel control block change, exhaust frame improvements, High Pressure Compressor - Variable Geometry Actuator (HPC VG) bushing material, oil tank mounting, and others. Due to the numerous small modifications included in this effort, the P3A does not identify kit, install schedule and milestones for each individual modification. This P3A reflects funding previously programmed in the High Pressure Turbine Cooling Plate P3A (MN 31922) to accommodate other engine improvement requirements. Concepts developed under the Navy's continuous improvement program (CIP). Design issues caused the Front Frame Transducer Bracket requirement to slip from FY00 to FY01. Additionally, FY01 has been increased by \$2M to take advantage of an Engine Build cost efficiency.

Aircraft Breakdown: Active 55, Reserve 0, ANG 0

**Development Status**

N/A.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT	2.0			0.1				3.2		0.8		0.3
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
MOD OF SPARES												
TOTAL COST (BP-1100)	2.0			0.1				3.2		0.8		0.3

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-117 MN-31927 OMNIBUS ENGINE MODIFICATIONS  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KIT'S NONRECUR				
EQUIPMENT				6.8
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
MOD OF SPARES				
TOTAL COST (BP-1100)				6.8

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-96

Contract Date (Month/CY)

Delivery Date (Month/CY)

**Installation Schedule**

	<u>FY-96</u>	
Quarters	1	2
Input	3	4
Output		

02/15/2000

FY 2001 PBR

Modification Title and No: SINGLE CONFIGURATION FLEET MN-31937

Models of Aircraft Affected: F-117A

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: F-117

PE 0207141F Team POWER

### Description/Justification

Presently, the F-117A fleet has two major radar absorbing material (RAM) coating configurations, a costly and labor intensive panel access technology, and five leading edge configurations. This effort will develop a single, optimized RAM coating and leading edge configuration which incorporates advanced panel access technologies for the F-117A fleet and Maintenance Trainer. This new configuration includes new leading edge technologies, spray-on coatings, new sheet RAMs and new panel access technologies. This effort will greatly reduce maintenance requirements, increase aircraft availability and preserve Radar Cross Section performance. Two aircraft kits completed during RDT&E phase; ten (10) kit buys/installs short of modifying the entire fleet because of higher than anticipated costs (installation hours, rate increases and kit price increases and withholds). The SIM/TRAINER cost in FY99(\$1.15M) is for the Maintenance Trainer. Note: FY99 kit install is trial kit install. Funding for installation is provided by CU-6 depot installs. Mod Induction/Checkout includes Receiving (post flight, functional checks, inspection, engine removal, defuel), Teardown (review of parts, exterior shake), Service Bulletin Installation, Build Up/Checkout (reinstall parts, hydro & electrical checkouts, final operations checks, coating installation), and Paint/Redeliver (install engines, seat and canopy, weight & balance, fuel checkouts, preflight paint).

Aircraft Breakdown: Active 53, Reserve 0, ANG 0

### Development Status

Development contract awarded June 96. All development and Flight Test completed Mar 99. Phases 1&2 included redesign of aircraft access panels, reduction in out-of-contour doublers and (RAM) products, evaluation of different types of sprayable RAM and Building 727 renovation to accommodate the robotic application system and integration of the coating delivery system. Phase 3 stripped and recoated a flight test asset, performed flight testing of the SCF modification and began preparations for fleet a/c mod. Phase 4 will complete preparations and fabricate the first lot of kits for fleet mod.

### Projected Financial Plan

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)	[2]	10.7										
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONREC			13	9.7	7	5.6	9	7.4	8	7.1	4	3.7
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA				0.2								
SIM/TRAINER			[1]	0.2								
SUPPORT-EQUIP												
MOD OF SPARES				1.4		0.3		0.9		0.3		0.3
MOD						4.8		4.3		4.6		4.2
INDUCTION/CHECKOUT												
INSTALLATION OF HARDWARE												
FY-99 13 KITS			[1]		[10]	8.4	[2]	1.8				
FY-00 7 KITS							[7]	6.3				
FY-01 9 KITS									[9]	8.7	[8]	7.9
FY-02 8 KITS												
FY-03 4 KITS												
TOTAL INSTALL	1				10	8.4	9	8.1	9	8.7	8	7.9
TOTAL COST (BP-1100)	13	11.5	7	19.2	9	20.6	8	20.7	4	16.1		

(Totals may not add due to rounding)

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**Follow-On Lead Time: 9 Months**

**Initial Lead Time: 9 Months**

**Follow-On Lead Time: 9 Months**

### **Installation Schedule**

### **Installation Schedule**



PE 0207141F Team POWER

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

## (Totals may not add due to rounding)

UNCLASSIFIED

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR			2	3.5
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
INSTALLATION OF HARDWARE				
FY-00 2 KITS			[2]	
TOTAL INSTALL			2	
TOTAL COST (BP-1100)			2	3.5

(Totals may not add due to rounding)

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 21 Months

Follow-On Lead Time: 0 Months

**Milestones**

	FY-00	FY-01	FY-02
Contract Date (Month/CY)	02/00		
Delivery Date (Month/CY)	11/01		

**Installation Schedule**

	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4
Input		2	
Output		2	

PE 0207141F Team POWER

## UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: F-117 MN-31971 AFMSS HARDWARE UPGRADE  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
INSTALLATION OF HARDWARE				
FY-00 20 KITS				
TOTAL INSTALL				
TOTAL COST (BP-1100)				
(Totals may not add due to rounding)				

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 15 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-00 FY-01  
Contract Date (Month/CY) 02/00  
Delivery Date (Month/CY) 05/01

**Installation Schedule**

	FY-00	FY-01
Quarters	1	2
Input	20	20
Output	20	20

**Models of Aircraft Affected: F-117A**

Aircraft 825 was grounded due to a landing mishap June 1997. The aircraft wasn't repaired until July 1999 and no modifications were conducted in the interim. The FY00 Appropriations Conference added \$3M to the F-117A Procurement account for the repair. However, Aircraft 825 was already being repaired with FY99 Operations & Maintenance Supplemental funding. Therefore, the F-117A program plans to use the \$3M to modify 825 to the current Fleet configuration by installing the Configuration Update-6 (Ring Laser Gyro Plus GPS Navigation Improvement Program) modification kit; and the manufacture and installation of the Configuration Update-7 (Single Configuration Fleet) modification kit. A Congressional notification package is in work. No work will be performed until approval has been obtained. Even with the FY99 O&M Supplemental to repair aircraft 825, this addition is required to bring this aircraft to the operational configuration.

**Aircraft Breakdown:** Active 1, Reserve 0, ANG 0

**Development for both CU-6 and CU-7 have been completed.**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)						
PROCUREMENT (3010)						
INSTALL KITS			1	3.0		
KITS NONRECUR						
EQUIPMENT						
EQUIP NONREC						
CHANGE ORDERS						
DATA						
SIM/TRAINER						
SUPPORT-EQUIP						

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-117 MN-6846 AIRCRAFT 825  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					1		1	3.0
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
TOTAL COST (BP-1100)					1		1	3.0
(Totals may not add due to rounding)								

Method of Implementation:

Initial Lead Time: 0 Months      Follow-On Lead Time: 0 Months

**Milestones**

FY-00

Contract Date (Month/CY)

Delivery Date (Month/CY)

02/15/2000

FY 2001 PBR

Modification Title and No: SERVICE BULLETINS MN-99999S

Models of Aircraft Affected: F-117A

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: F-117

PE 0207141F Team POWER

**Description/Justification**

The F-117A Fighter is a Contractor Logistics Support aircraft managed under Total System Program Responsibility (TSPR) and is maintained in a manner consistent with FAA standards. Service Bulletins (SB) improve safety, reliability and maintainability. FY96, FY97 and FY98 funding continues efforts initiated in 3010/BP19. Funding from FY99 to FY03 applies to subsequent low hour/low cost efforts (i.e. APU Exhaust Duct Clamp, Drag Chute Mechanism, B/A Detector Inaccessible Areas, etc.). Increases in FY00-FY05 have been added to the SB line to include 3 new Service Bulletins (i.e. Landing Gear Refurbishment, Metal Tip C-Probe, Canopy Saw Tooth Doubler) as well as installing CU-6 & CU-7 (with applicable SBs) into aircraft 825 as it completes Depot Repair. Due to the numerous small Service Bulletins included in this effort, the P3A does not identify kit, install schedule and milestones for each individual modification.

Aircraft Breakdown: Active 55, Reserve 0, ANG 0

**Development Status**

N/A.

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

AIRCRAFT

PRIOR	FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	9.8		2.2		1.7		1.2		0.5	
TOTAL COST (BP-1100)	9.8		2.2		1.7		1.2		0.5	

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-117 MN-99999S SERVICE BULLETINS  
(Continued)

FY-04	FY-05	TO COMP	TOTAL
QTY	QTY	QTY	QTY
COST	COST	COST	COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

AIRCRAFT

16.8

TOTAL COST (BP-1100)

0.1

0.8

16.8

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-96

Contract Date (Month/CY)

Delivery Date (Month/CY)



02/15/2000

FY 2001 PBR

Modification Title and No: FM IMMUNITY MN-DC101

Models of Aircraft Affected: F-117A

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: F-117

PE 0207141F Team POWER

**Description/Justification**

The precision approach and landing requirements for Global Air Traffic Management (GATM) requires increased selectivity and filtering to existing Instrument Landing Systems (ILS). This increased selectivity and filtering is referred to as ILS Frequency Modulation (FM) Immunity. The International Civil Aviation Organization (ICAO) has established 1 Jan 01 to have FM Immunity capability on aircraft operating in Europe. The IOM in FY01 will fund the start of Lockheed Martin Skunk Works integration efforts, flight test planning, F-117A environmental qualification testing, and three qualification/integration MMRs.

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

**Development Status**

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST
			3		
			0.1		
			1.5		
			3		
			1.6		

(Continued)

UNCLASSIFIED

Fact Sheet: F-117 MN-DC101 FM IMMUNITY  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					3			0.1
KITS NONRECUR								1.5
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
TOTAL COST (BP-1100)					3			1.6

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-01

Contract Date (Month/CY)

Delivery Date (Month/CY)

## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications						P-1 ITEM NOMENCLATURE: A-10
	1999	2000	2001	2002	2003	2004
						2005
<b>COST (In Mil)</b>	\$28.344	\$27.133	\$33.891	\$11.359	\$21.968	\$42.644
						\$83.783

This line item funds modifications to the A-10 aircraft. The A-10 is a twin engine, single seat, close air support aircraft capable of delivering a full range of air-to-ground munitions as well as self defense air-to-air missiles. The primary modification budgeted in FY01 is the Embedded Global Positioning and Inertial Navigation System (EGI). Other modifications are budgeted to enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

MOD CLASS P-S	MODIFICATION TITLE	FY-99 0.1	FY-00 0.1	FY-01 0.1	FY-02 0.1	FY-03 0.1	FY-04 0.1	FY-05 0.1	COST IO GO 0.5	TOTAL PROG. 1.0
TOTAL FOR CLASS P-S										
P	18202B TF-34 AGB LIFE IMPRO	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	1.0
	3150EG EGI	26.7	25.5	32.1	7.8	5.4			1.6	4.0
	3301A INTEGRATED FLIGHT &				1.3	7.8	7.5	10.6		193.7
	37120 DIGITAL DATA LINK							27.2	143.7	27.2
	4262 DIGITAL TERRAIN SYST						8.6			170.9
	7142 COLOR AIRBORNE VID	1.5								8.6
	9601 ONBOARD OXYGEN GE				0.6	3.3	5.7	8.3	27.5	4.5
	9602 COUNTERMEASURE SE			1.7	1.6	5.3	6.1	7.8	3.8	45.4
	9800 A-10 REGEN						10.1	12.7	74.1	26.4
	9801 1760 BUS						4.0	16.7	80.0	96.9
	99999X LOW COST MODIFICATI	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	100.8
	DC101 FM IMMUNITY		1.6							1.5
	Z88888 REPROGRAMMINGS	0.1	0.1							1.6
TOTAL FOR CLASS P										
		28.4	27.3	33.9	11.4	21.9	42.5	83.7	331.2	681.6

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 32	PAGE NO. 1
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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)										DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications					P-1 ITEM NOMENCLATURE: A-10					
	1999		2000	2001	2002	2003	2004	2005		
COST (In Mil)	\$28.344	\$27.133	\$33.891	\$11.359	\$21.968	\$42.644	\$83.783			

This line item funds modifications to the A-10 aircraft. The A-10 is a twin engine, single seat, close air support aircraft capable of delivering a full range of air-to-ground munitions as well as self defense air-to-air missiles. The primary modification budgeted in FY01 is the Embedded Global Positioning and Inertial Navigation System (EGI). Other modifications are budgeted to enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

CLASS	MOD	MODIFICATION	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
	NR	TITLE									
TOTAL FOR AIRCRAFT A-10			28.5	27.4	34.0	11.5	22.0	42.6	83.8	331.7	682.7

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 32	PAGE NO. 2
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02/15/2000

FY 2001 PBR

Modification Title and No: EGI MN-3150EG

Models of Aircraft Affected: OA/A-10

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: SM-ALC McClellan AFB Sacramento, CA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: A-10

PE 0207131F Team POWER

**Description/Justification**

The Embedded Global Positioning and Inertial Navigation System (EGI) is a self-contained, all-weather navigation system which provides positioning, velocity, and acceleration data for the aircraft. In addition, EGI will replace the present inertial navigation unit (LN 39). This will result in an \$18M savings per year in maintenance costs upon completion of the modification installation. FY92 lead time is 6 months. FY95 NRE funded program changed from GPS -3A to EGI/IDM configuration. FY96 NRE funded program changed from EGI/IDM to EGI only configuration. Mod of spares are varied due to different qty's for ea type of spare. FY99-01 change orders funding planned for ECPs to resolve parts obsolesce issues. FY99-01 contract award dates are driven by purchase of GFE from 00-ALC.

The kit and installation total qty's are two greater than the a/c breakdown total because the two aircraft modified in FY92 had to be remodified with new kits. FY01 kit install average unit cost is higher due to USAFE 'in theater' installations which has higher install cost.

Aircraft Breakdown: Active 216, Reserve 51, ANG 101

**Development Status**

N/A.

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

ICS

FLIGHT TEST

MOD OF SPARES

OGC

SOFTWARE

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
123	5.4	85	1.5	68	1.1	94
1.5	24.6					1.5
[123]	30.2	[85]	17.5	[68]	15.2	[94]
						20.2
	1.6		0.5		0.1	0.2
	3.2		3.0		0.1	0.1
	4.7		0.5			
	5.8		0.2		0.2	0.2
	1.8		0.2			
	0.1		0.0		0.1	
	0.3		0.1		0.1	0.2
	17.7		0.6			

**Protected Financial Plan Continued**

UNCLASSIFIED

(Continued)

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
INSTALLATION OF HARDWARE												
FY-92	2	KITS	[2]	0.2								
FY-95	2	KITS	[2]	0.2								
FY-96	1	KITS	[1]	0.1								
FY-97	65	KITS	[6]	0.4								
FY-98	53	KITS										
FY-99	85	KITS					[85]	7.5				
FY-00	68	KITS					[25]	2.2	[43]	4.1		
FY-01	94	KITS							[35]	3.3	[59]	5.0
TOTAL INSTALL	11		0.8		3	2.5	109	8.5	78	7.4	59	5.0
TOTAL COST (BP-1100)	123		96.3		85	26.7	68	25.5	94	32.1		5.4

(Totals may not add due to rounding)

UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: A-10 MN-3150EG EGI  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			370	9.6
KITS NONRECUR				24.6
EQUIPMENT			[370]	83.2
EQUIP NONREC				2.4
CHANGE ORDERS				6.4
DATA				
SIM/TRAINER				5.3
SUPPORT-EQUIP				6.9
ICS				2.0
FLIGHT TEST				0.2
MOD OF SPARES				1.0
OGC				18.3
SOFTWARE				
INSTALLATION OF HARDWARE				
FY-92 2 KITS			[2]	0.2
FY-95 2 KITS			[2]	0.2
FY-96 1 KITS			[1]	0.1
FY-97 65 KITS			[65]	6.8
FY-98 53 KITS			[53]	4.5
FY-99 85 KITS			[85]	7.5
FY-00 68 KITS			[68]	6.3
FY-01 94 KITS			[94]	8.3
TOTAL INSTALL			370	33.9
TOTAL COST (BP-1100)			370	193.7

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 6 Months

Follow-On Lead Time: 14 Months

**Milestones**

Contract Date (Month/CY)	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
Delivery Date (Month/CY)	03/92			09/95	03/96	06/97	03/98	08/99	03/00	03/01		
	09/92			11/96	05/97	08/98	05/99	10/00	05/01	05/02		

**Installation Schedule**

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-99
Quarters	1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3
Input		2											
Output			2										

**Installation Schedule Continued**

	FY-00				FY-01				FY-02				FY-03			
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Input	1	29	36	43	36	36	23	15	18	18	21	21	24	26	9	
Output	1	19	33	41	39	36	30	15	17	18	20	21	23	25	18	

UNCLASSIFIED

(Continued)



PE 0207131F Team POWER

The A-10 CAVTR modification, also known as Color Airborne Video Tape Recorder (AVTR) system to provide an increased recording capability by allowing the average two hour sortie to be properly documented. This modification will remove the existing AVTR system and replace it with a system that will have a two hour record capability and be color capable. The proposed system will be designed for two-level maintenance and serviced at the organizational level by flightline personnel. The equipment that has been installed in the aircraft is a ruggedized version of commercial off-the-shelf components.

Aircraft Breakdown: Active 219, Reserve 0, ANG 0

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	150	0.5	69	0.2								
KITS NONRECUR												
EQUIPMENT	[150]	2.3	[69]	1.0								
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP		0.2		0.3								
OGC		0.1		0.0								
TOTAL COST (BP-1100)	150	3.0	69	1.5								
(Totals may not add due to rounding)												

**TOTAL COST (BP-1100)** 15  
(Totals may not add due to rounding)

UNCLASSIFIED

	FY-04 QTY	COST	FY-05 QTY	COST	TO COMP QTY	COST	TOTAL QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							219	0.7
KITS NONRECUR								
EQUIPMENT							[219]	3.3
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								0.4
SUPPORT-EQUIP								0.1
OGC								
TOTAL COST (BP-1100)							219	4.5

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-98	FY-99
Contract Date (Month/CY)	06/98	12/98
Delivery Date (Month/CY)	12/98	06/99

02/15/2000

FY 2001 PBR

Modification Title and No: COUNTERMEASURE SET MN-9602

Models of Aircraft Affected: OA/A-10

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: SM-ALC McClellan AFB Sacramento, CA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: A-10

PE 0207131F Team POWER

**Description/Justification**

The current Electronic Combat (EC) systems were installed into the aircraft under a design concept that required a separate Cockpit Control Unit (CCU) for each system. The EC systems functionality as a whole is cumbersome, systematically disjointed, with limited growth capability. A single unit will replace all existing CCUs and provide control of operation, mode selection, and management of the individual electronic warfare systems using one CCU. This unit is Night Vision Goggle (NVG) compatible. It provides hands-on control, and improves pilot vehicle interface. The system can be programmed with up to 16 different chaff and flare scenarios that can be selected by the pilot. The current system supports only 1 pilot selected scenario. The system provides a manual mode of operation for coordinated EC system response. Future automatic, or semi-automatic, threat response growth provisions are included and await the development of applicable threat response software programs for implementation. This is follow-on modification procurement for Active Forces and ANG aircraft based on AFRES program. Group B is managed by WR-ALC.

Aircraft Breakdown: Active 214, Reserve 0, ANG 100

**Development Status**

N/A

**Projected Financial Plan**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)						
PROCUREMENT (3010)						
INSTALL KITS			30	0.4	14	0.2
KITS NONRECUR						1.2
EQUIPMENT			[30]	1.2	[14]	0.6
EQUIP NONREC						3.6
CHANGE ORDERS						
DATA				0.0		
SIM/TRAINER			[2]	0.1	[2]	0.1
SUPPORT-EQUIP				0.0		0.1
OGC				0.0		0.0
INSTALLATION OF HARDWARE						
FY-01					[30]	0.7
FY-02						
FY-03						[14]
FY-04						0.3
FY-05						
FY-06						
TOTAL INSTALL						
	30		1.7		30	0.7
					14	1.6
					88	5.3
TOTAL COST (BP-1100)						
(Totals may not add due to rounding)						

(Continued)

UNCLASSIFIED

Fact Sheet: A-10 MN-9602 COUNTERMEASURE SET

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS	69	1.0	102	1.4	11	0.2	314	4.3
KITS NONRECUR								
EQUIPMENT	[69]	2.9	[102]	4.3	[11]	0.5	[314]	12.9
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER			[2]	0.1	[1]	0.1	[9]	0.6
SUPPORT-EQUIP		0.0		0.1		0.0		0.3
OGC		0.0		0.1		0.0		0.2
INSTALLATION OF HARDWARE								
FY-01 30 KITS							[30]	0.7
FY-02 14 KITS							[14]	0.3
FY-03 88 KITS	[88]	2.2					[88]	2.2
FY-04 69 KITS			[69]	1.8			[69]	1.8
FY-05 102 KITS					[102]	2.7	[102]	2.7
FY-06 11 KITS					[11]	0.3	[11]	0.3
TOTAL INSTALL	88	2.2	69	1.8	113	3.0	314	8.1
TOTAL COST (BP-1100)	69	6.1	102	7.8	11	3.8	314	26.4
(Totals may not add due to rounding)								

Method of Implementation: COMBINATION

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07
Contract Date (Month/CY)	12/00	12/01	12/02	12/03	12/04	12/05	12/06
Delivery Date (Month/CY)	12/01	12/02	12/03	12/04	12/05	12/06	

**Installation Schedule**

	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	7 8 8 7	7 8 8 7	7 8 8 7	7 8 8 7	7 8 8 7	7 8 8 7	7 8 8 7
Output	7 8 8 7	7 8 8 7	7 8 8 7	7 8 8 7	7 8 8 7	7 8 8 7	7 8 8 7



(Continued)

UNCLASSIFIED

Fact Sheet: A-10 MN-DC101 FM IMMUNITY  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR			25	1.1
EQUIPMENT				0.1
EQUIP NONREC				
CHANGE ORDERS				0.2
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
INTEGRATION				0.3
TOTAL COST (BP-1100)			25	1.6

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 8 Months

Follow-On Lead Time: 6 Months

**Milestones**

FY-00 FY-01 FY-02

Contract Date (Month/CY) 06/00

Delivery Date (Month/CY) 02/01

## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: F-15			
	1999	2000	2001	2002	2003	2004
						2005
<b>COST (In Mil)</b>	\$233.832	\$308.907	\$258.247	\$249.168	\$279.598	\$284.892
						\$125.456

This line item funds modifications to the F-15 aircraft. The F-15A/B/C/D is a twin engine, single seat, supersonic, all-weather, day/night, air-superiority fighter. The F-15E is a twin engine, two seat, supersonic dual-role, day/night, all-weather, deep interdiction fighter with multi-role air-to-air capabilities. The overall goal of the modifications budgeted in FY01 is to enhance flight safety while improving reliability and maintainability. The primary mods in FY01 are F100-220E Engine Upgrade; ALQ 135, Band 1.5; FDL Link 16; and, APG 63 Radar Upgrade. The specific modifications budgeted and programmed are below.

CLASS P	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
	10211B	SECONDARY POWER U	0.3	3.3	3.9	2.3	0.6	4.4	1.5	0.1	17.5
	13647B	HIGH PRESSURE WATE		1.6							54.4
	16628B	LANDING GEAR WIRIN	2.0	0.5	0.6						15.7
	16628E	LG WIRING/SWITCHES	1.8	2.3							4.1
	19203B	F100-220E ENGINE UPG	37.8	54.5	37.3	35.0	68.0	67.2	18.1		404.1
	3150E	GPS	3.6	5.0	1.1						41.7
	6048	4TH ROBUST BLADE	0.1								3.8
	6052	2ND VANE INNER AIR S	0.5	0.2							1.1
	6054	HYBRID NOZZLE COKIN	1.9								6.9
	6060	1ST STAGE TIP SHROU	0.3								1.8
	6071	4TH DISK BRUSH SEAL	0.6	0.5							1.9
	6086	SUPER CONVECTIVE S	4.3	1.5							9.4
	6106	SECONDARY POWER U			4.5	3.7	5.2	6.3	0.1		19.8
	6109	FIRST BRUSH SEAL	2.2	0.6							5.1
	6141	EAGLE 229 HPT OD FLO	3.3	1.3							8.7
	6142	COMBUSTER IMPROVE	0.6	0.6							1.2

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 33	PAGE NO. 1
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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)										DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications				P-1 ITEM NOMENCLATURE: F-15						
	1999	2000	2001	2002	2003	2004	2005			
COST (In Mil)	\$233.832	\$308.907	\$258.247	\$249.168	\$279.598	\$284.892	\$125.456			

This line item funds modifications to the F-15 aircraft. The F-15A/B/C/D is a twin engine, single seat, supersonic, all-weather, day/night, air-superiority fighter. The F-15E is a twin engine, two seat, supersonic dual-role, day/night, all-weather, deep interdiction fighter with multi-role air-to-air capabilities. The overall goal of the modifications budgeted in FY01 is to enhance flight safety while improving reliability and maintainability. The primary mods in FY01 are F100-220E Engine Upgrade; ALQ 135, Band 1.5; FDL Link 16; and, APG 63 Radar Upgrade. The specific modifications budgeted and programmed are below.

CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
6144		FAN IMPROVEMENT			0.1						0.1
6145		FUEL NOZZLE DAMPIN		0.5	0.7	0.3					1.5
6146		IMPROVED DURABILITY		0.7							0.7
6147		2ND STAGE FAN IMPRO		0.9	0.9	0.5					2.4
6148		3RD STAGE FAN IMPRO		2.3	2.0						4.3
6149		REOPERATED AUGME		0.3							0.3
6155		DIGITAL ELECTRONIC			0.1						0.1
6156		ENHANCED MAINTENA		0.2	0.2						0.4
8049		APG-63V(1) RADAR UP	99.8	113.8	117.5	93.8	89.3	4.1	2.5	169.9	796.3
8237		DIGITAL MAP SYSTEM	2.9	6.7	12.6	4.8					27.1
8250		FIGHTER DATA LINK (	44.2	35.4					12.0		141.8
8265		PROGRAMMABLE ARM			9.5	14.3	15.8	18.7	2.1	22.3	82.6
8314		AIR DATA PROCESSOR		4.7	5.2	5.3	4.4	5.5	4.3	3.2	32.6
8352		JOINT HELMET-MOUNT			5.5	18.3	23.7	8.6	24.6	17.6	98.4
8357		ADVANCED DISPLAY C						28.1	35.5	33.9	97.5
8419		ALQ 135, BAND 1.5	25.0	33.0	41.8	70.7	51.3	98.1			320.0

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 33	PAGE NO. 2
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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: F-15				
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005
	\$233.832	\$308.907	\$258.247	\$249.168	\$279.598	\$284.892	\$125.456

This line item funds modifications to the F-15 aircraft. The F-15A/B/C/D is a twin engine, single seat, supersonic, all-weather, day/night, air-superiority fighter. The F-15E is a twin engine, two seat, supersonic dual-role, day/night, all-weather, deep interdiction fighter with multi-role air-to-air capabilities. The overall goal of the modifications budgeted in FY01 is to enhance flight safety while improving reliability and maintainability. The primary mods in FY01 are F100-220E Engine Upgrade; ALQ 135, Band 1.5; FDL Link 16; and, APG 63 Radar Upgrade. The specific modifications budgeted and programmed are below.

CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
8420		FDL LINK 16		23.4	13.5			22.2		6.7	65.8
8454		ACFT WEAPONS CONT		1.7							1.7
99999E		MISC ENGINE UPDATE	0.1	0.1	0.1	0.1					0.2
99999U		LOW COST RETROFIT	0.7	1.3	0.2	0.1	0.1	0.1	0.7	0.1	11.1
99999X		LOW COST MODIFICATI	0.4	0.3	0.1	0.1	0.3	0.1	1.9	0.1	6.1
DC101		FM IMMUNITY		3.4	1.1						4.5
IDECM		COMMON ELECTRIC C				0.1	21.1	21.7	22.2	205.5	270.5
Z88888		REPROGRAMMINGS	1.3	8.6							10.1
TOTAL FOR CLASS P			233.9	309.0	258.5	249.4	279.7	285.1	125.5	459.5	2,573.3
TOTAL FOR AIRCRAFT F-15			233.9	309.0	258.5	249.4	279.7	285.1	125.5	459.5	2,573.3

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 33	PAGE NO. 3
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02/15/2000

FY 2001 PBR

Modification Title and No: SECONDARY POWER UPGRADE A-D MN-10211B

Models of Aircraft Affected: F-15 A-D

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0207130F Team AIR

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-15 Class PUNCLASSIFIED  
MODIFICATION OF AIRCRAFT**Description/Justification**

Modernization of five commodity components of the Secondary Power System (SPS), including the Jet Fuel Starter Fuel Control Unit, Central Gearbox, Left and Right hand Airframe Mounted Accessory Drive (AMAD), and Clutch Control Valve. Improves R&M of system by 125%. Increases the overall reliability of the SPS. Current system is responsible for 22% of all ground aborts, with 34,000 mhrs per 100K flight hours expended for unscheduled maintenance. Modification quantity is for five component parts of varying total quantities, completed on these items at the Depot, and installed by Organizational and Intermediate (O&I) maintenance into 523 aircraft in the field. All installs and spares on the shelf are to be modified. Quantities shown are component quantities to be modified rather than aircraft install quantities.

Aircraft Breakdown: Active 403, Reserve 0, ANG 120

**Development Status**

N/A.

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

INSTALL KITS	129	0.8	45	0.3	649	3.2	737	3.8	434	2.3	68	0.6
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA		0.1				0.1						
SIM/TRAINER												
SUPPORT-EQUIP												
MOD OF SPARES												
OGC		0.0		0.0		0.0		0.0		0.0		0.0
TOOLING		0.1										
INSTALLATION OF HARDWARE												
FY-98			[129]	0.0								
129 KITS					[45]	0.0						
FY-99												
45 KITS												
FY-00												
649 KITS							[649]	0.0				
FY-01												
737 KITS									[737]	0.0		
FY-02												
434 KITS											[434]	0.0
FY-03												
68 KITS												
FY-04												
884 KITS												
FY-05												
323 KITS												
TOTAL INSTALL			129	0.0	45	0.0	649	0.0	737	0.0	434	0.0
TOTAL COST (BP-1100)	129	1.0	45	0.3	649	3.3	737	3.9	434	2.3	68	0.6
(Totals may not add due to rounding)												

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-10211B SECONDARY POWER UPGRADE A-D

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS	884	4.4	323	1.5			3,269	16.9
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.2
SIM/TRAINER								
SUPPORT-EQUIP								
MOD OF SPARES								
OGC		0.0		0.0				0.1
TOOLING								0.1
INSTALLATION OF HARDWARE								
FY-98 129 KITS							[129]	0.0
FY-99 45 KITS							[45]	0.0
FY-00 649 KITS							[649]	0.0
FY-01 737 KITS							[737]	0.0
FY-02 434 KITS							[434]	0.0
FY-03 68 KITS							[68]	0.0
FY-04 884 KITS	[68]	0.0	[884]	0.0			[884]	0.0
FY-05 323 KITS					[323]	0.1	[323]	0.1
TOTAL INSTALL	68	0.0	884	0.0	323	0.1	3,269	0.2
TOTAL COST (BP-1100)	884	4.4	323	1.5		0.1	3,269	17.5
(Totals may not add due to rounding)								

Method of Implementation: DEPOT

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06
Contract Date (Month/CY)	03/98	02/99	02/00	12/00	12/01	12/02	12/03	12/04	12/05
Delivery Date (Month/CY)	03/99	02/00	02/01	12/01	12/02	12/03	12/04	12/05	

**Installation Schedule**

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input		43 43 43	43 43 43	11 11 11	12 162 162	162 162 163	184 184 184	185 185 185	185 185 185
Output		43 43 43	43 43 43	11 11 11	12 162 162	162 162 163	184 184 184	185 185 185	185 185 185

Installation Schedule Continued

		FY-06			
Quarters	1	2	3	4	
Input	81	81	81	80	
Output	81	81	81	80	

UNCLASSIFIED

(Continued)

02/15/2000

FY 2001 PBR

Modification Title and No: HIGH PRESSURE WATER SEPARATOR MN-13647B

Models of Aircraft Affected: F-15 C/D

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0207130F Team AIR

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-15

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

**Description/Justification**

This modification will improve the cooling of the Environmental Control System (ECS) by replacing the primary and cabin water separator with a High Pressure Water Separator; dry air can be provided at colder temperatures. The increased cooling will provide a 40% increase in reliability of Avionics Line Replaceable Units (LRU). A retrofit mod, this modification is a prerequisite to the Fighter Data Link, APG63V(1) and all other planned avionics modifications.

Aircraft Breakdown: Active 278, Reserve 0, ANG 0

**Development Status**

Complete.

**Projected Financial Plan**

	PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	278	41.4										
KITS NONRECUR		1.5										
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA		0.1										
SIM/TRAINER												
SUPPORT-EQUIP		0.2										
MOD OF SPARES		0.4										
TOOLING	[3]											
OGC												
INSTALLATION OF HARDWARE												
FY-90 2 KITS												
FY-92 62 KITS	[2]	2.3										
FY-93 98 KITS	[62]	4.3										
FY-95 1 KITS	[98]				[1]	0.1						
FY-96 61 KITS	[61]	2.7										
FY-97 54 KITS					[54]	1.6						
TOTAL INSTALL	223	9.2			55	1.6						
TOTAL COST (BP-1100)	278	52.8										
(Totals may not add due to rounding)												



## MODIFICATION OF AIRCRAFT

PE 0207130F Team AIR

## **Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	445	5.9	69	1.0								
KITS NONRECUR												
EQUIPMENT	[445]	4.6	[69]	0.6								
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
MOD OF SPARES		0.0										
OGC		0.0										
INSTALLATION OF HARDWARE												
FY-89	88	KITS										
FY-90	[115]	27	KITS	0.8								
FY-91	[20]	20	KITS	0.3								
FY-92	[83]	83	KITS	0.7								
FY-94	[98]	107	KITS	0.3								
FY-97		48	KITS									
FY-98		72	KITS									
FY-99		69	KITS									
TOTAL INSTALL	316	2.1	48	0.4	72	0.5	69	0.6				
TOTAL COST (BP-1100)	445	12.6	69	2.0								
(Totals may not add due to rounding)												

UNCLASSIFIED





02/15/2000  
 FY 2001 PBR  
 Modification Title and No: LG WIRING/SWITCHES MN-16628E  
 Models of Aircraft Affected: F-15E  
 Center: WR-ALC Warner Robins AFB Warner Robins, GA  
 PE 0207134F Team POWER  
 Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: F-15

**Description/Justification**  
 This effort modifies landing gear to encapsulate wiring; installs new design proximity and weight on wheels (WOW) switches to latest configuration. 140 aircraft get cabling, proximity switches, and Wow switches and require Depot Level install. The remaining 71 aircraft receive only cabling and proximity switches and will be installed at Organizational and Intermediate (O&I) Level.

Aircraft Breakdown: Active 201, Reserve 0, ANG 0

**Development Status**  
 N/A.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS			100	1.8	101	1.6						
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
OGC												
INSTALLATION OF HARDWARE												
FY-99 100 KITS					[100]	0.4						
FY-00 101 KITS					[40]	0.3						
TOTAL INSTALL					140	0.6						
TOTAL COST (BP-1100)			100	1.8	101	2.3						

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-16628E LG WIRING/SWITCHES

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)							201	3.5
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
OGC								
INSTALLATION OF HARDWARE								
FY-99 100 KITS							[100]	0.4
FY-00 101 KITS							[40]	0.3
TOTAL INSTALL							140	0.6
TOTAL COST (BP-1100)							201	4.1

(Totals may not add due to rounding)

Method of Implementation: COMBINATION

Initial Lead Time: 10 Months

Follow-On Lead Time: 6 Months

Milestones

	FY-99	FY-00	FY-01
Contract Date (Month/CY)	01/99	02/00	
Delivery Date (Month/CY)	11/99	08/00	

Installation Schedule

	FY-99		FY-00		FY-01	
Quarters	1	2	3	4	1	2
Input		1	28	28	28	27
Output		1	28	28	28	27

02/15/2000

FY 2001 PBR

Modification Title and No: F100-220E ENGINE UPGRADE MN-19203B

Models of Aircraft Affected: F-15 C/D

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0207130F

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: F-15

Team AIR

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT**Description/Justification**

This effort modifies the F100 engine to the 220E configuration. -220E includes the core, gear pump and digital electronic engine control (DBEC) system. It will be equivalent to the new production -220 engine. Maintenance benefits include no engine trim, automated diagnostics, 23% fewer organizational- scheduled inspections, 43% reduction in base /EFH and 86% increased availability. Benefits include avoidance of six class A mishaps. Operational benefits include 32% faster idle-to-max transient, normal 10% thrust improvement, full envelope capability, unrestricted throttle movement, automatic secondary control and 225 knot air start capability. Mod saves \$2.4M in O&M costs. This is a Commodity mod. Install plan utilizes scheduled Depot Overhaul (O&M) funding with the exception of 7 mod installs contracted in USAFE in FY98 that did not occur with engine overhaul.

Aircraft Breakdown: Active 260, Reserve 0, ANG 7

**Development Status**

Completed.

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

MOD OF SPARES

OGC

**INSTALLATION OF HARDWARE**

FY-93 3 KITS

FY-94 18 KITS

FY-97 20 KITS

FY-98 18 KITS

FY-99 22 KITS

FY-00 31 KITS

FY-01 13 KITS

FY-02 20 KITS

FY-03 38 KITS

FY-04 40 KITS

FY-05 8 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

	PRIOR QTY	COST	FY-99 QTY	COST	FY-00 QTY	COST	FY-01 QTY	COST	FY-02 QTY	COST	FY-03 QTY	COST
59	86.2	22	37.8	31	54.5	13	37.3	20	35.0	38	68.0	

(Totals may not add due to rounding)

	PRIOR QTY	COST	FY-99 QTY	COST	FY-00 QTY	COST	FY-01 QTY	COST	FY-02 QTY	COST	FY-03 QTY	COST
59	60.0	22	33.0	31	49.5	13	20.5	20	30.8	38	59.6	
[21]	23.6	[3]	4.7	[1]	2.7	[10]	15.5	[2]	3.0	[1]	0.9	
	0.7		0.1	[2]	0.2		0.2		0.2	[4]	6.0	
											0.4	
[7]	2.0						2.0		1.0			
										1.0		
												1.0
7	2.0				2.0		1.0		1.0			
59	86.2	22	37.8	31	54.5	13	37.3	20	35.0	38	68.0	

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-19203B F100-220E ENGINE UPGRADE

UNCLASSIFIED

RD1&E (3600)

	FY-04	FY-05	TOTAL
	QTY COST	QTY COST	QTY COST

PROCUREMENT (3010)

INSTALL KITS						
KITS NONRECUR						
EQUIPMENT	40	62.8	8	12.6	231	328.9
EQUIP NONREC						
CHANGE ORDERS						
DATA						
SIM/TRAINER						
SUPPORT-EQUIP						
MOD OF SPARES						
OGC	[2]	3.0	[3]	4.3	[2]	0.9
		0.4		0.1	[47]	62.8
						2.3

INSTALLATION OF HARDWARE

FY-93	3	KITS				
FY-94	18	KITS				
FY-97	20	KITS				
FY-98	18	KITS				
FY-99	22	KITS				
FY-00	31	KITS				
FY-01	13	KITS				
FY-02	20	KITS				
FY-03	38	KITS				
FY-04	40	KITS				
FY-05	8	KITS				
TOTAL INSTALL			1.0	1.1	7	9.1

TOTAL COST (BP-1100)	40	67.2	8	18.1	231	404.1
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(Totals may not add due to rounding)

Method of Implementation: OVERHAUL/CFT

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

Milestones

Contract Date (Month/CY)	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
Delivery Date (Month/CY)	06/95	06/96	06/97	06/98	06/99	02/00	02/01	02/02	12/03	12/04	12/05		

Installation Schedule

Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Input																
Output																

**Installation Schedule Continued**

	<u>FY-01</u>				<u>FY-02</u>				<u>FY-03</u>				<u>FY-04</u>				<u>FY-05</u>			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Quarters																				
Input																				
Output																				

UNCLASSIFIED

(Continued)

02/15/2000

FY 2001 PBR

Modification Title and No: GPS MN-3150E

Models of Aircraft Affected: F-15E

## UNCLASSIFIED

## MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-15 Class P

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0207134F Team POWER

**Description/Justification**

The NAVSTAR Global Positioning System (GPS) is a space based radio navigation system that will provide suitably equipped host vehicles with capability for highly accurate jam , three dimensional position, velocity, and worldwide coverage in all weather to improve mission effectiveness. Current program includes Avionics Interface Unit (AIU) buy. Two aircraft received mod through RDT&E integration, which will remain on the aircraft. Remaining 199 kits/installs shown here.

The Embedded GPS/INS (EGI) program was dependent on OFF Suite 3, which is now fielded. The current F-15 programs dependent on the EGI installs are OFF Suite 4, Link-16, PACS/ Smart Weapons, and Air Display Core Processor (ADCP).

Aircraft Breakdown: Active 199, Reserve 0, ANG 0

**Development Status**

Complete.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		1.6		0.1								
PROCUREMENT (3010)												
INSTALL KITS	129	2.8	25	0.3	42	0.5						
KITS NONREC	3	8.5										
EQUIPMENT	[129]	18.3	[25]	1.9	[42]	3.6						
EQUIP NONREC	[3]	0.8										
CHANGE ORDERS												
DATA		0.3										
SIM/TRAINER	[13]	0.5										
SUPPORT-EQUIP		0.3										
OGC		0.0		0.1		0.1						
TOOLING		0.0										
INSTALLATION OF HARDWARE												
FY-94 3 KITS	[3]	0.1										
FY-96 20 KITS	[20]	0.3										
FY-97 16 KITS			[16]	0.3								
FY-98 93 KITS			[55]	1.1	[38]	0.4						
FY-99 25 KITS					[25]	0.3						
FY-00 42 KITS							[42]	1.1				
TOTAL INSTALL	23	0.4	71	1.4	63	0.8	42	1.1				
TOTAL COST (BP-1100)	132	32.0	25	3.6	42	5.0						

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-3150E GPS  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								1.7
PROCUREMENT (3010)								
INSTALL KITS					196	3.7		
KITS NONRECUR					3	8.5		
EQUIPMENT					[196]	23.8		
EQUIP NONREC					[3]	0.8		
CHANGE ORDERS								
DATA						0.3		
SIM/TRAINER					[13]	0.5		
SUPPORT-EQUIP						0.3		
OGC						0.2		
TOOLING						0.0		
INSTALLATION OF HARDWARE								
FY-94 3 KITS					[3]	0.1		
FY-96 20 KITS					[20]	0.3		
FY-97 16 KITS					[16]	0.3		
FY-98 93 KITS					[93]	1.5		
FY-99 25 KITS					[25]	0.3		
FY-00 42 KITS					[42]	1.1		
TOTAL INSTALL					199	3.6		
TOTAL COST (BP-1100)					199	41.7		
(Totals may not add due to rounding)								

Method of Implementation: COMBINATION

Initial Lead Time: 26 Months

Follow-On Lead Time: 12 Months

#### Milestones

	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	02/94	02/97	03/97	03/98	01/98	01/99	01/00		
Delivery Date (Month/CY)	04/96	02/98	03/98	01/99	01/00	01/01			

#### Installation Schedule

	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input								
Output								
Quarters	1 2 3 4							
Input								
Output								

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: HYBRID NOZZLE COKING MN-6054  
 Models of Aircraft Affected: F-15E - 229 ENGINE  
 Center: WR-ALC Warner Robins AFB Warner Robins, GA  
 PE 0207134F Team POWER  
 Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: F-15

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

**Description/Justification**  
 This modification increases the aircraft starting performance. A redesigned nozzle corrects coking of internal flow passages which results in better starting performance.

Aircraft Breakdown: Active 75, Reserve 0, ANG 0

**Development Status**  
 N/A.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	162	5.1	52	1.9								
KITS NONREC												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
TOTAL COST (BP-1100)	162		52	1.9								
(Totals may not add due to rounding)												



(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-6054 HYBRID NOZZLE COKING

(Continued)

FY-04	FY-05	TO COMP	TOTAL
QTY	QTY	QTY	QTY
COST	COST	COST	COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

214	6.9	214	6.9
-----	-----	-----	-----

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 10 Months

Follow-On Lead Time: 10 Months

**Milestones**

Contract Date (Month/CY)	FY-96	FY-97	FY-98	FY-99
Delivery Date (Month/CY)	09/97	07/98	12/98	10/99

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: 4TH DISK BRUSH SEAL MN-6071  
 Models of Aircraft Affected: F-15E - 229 ENGINE  
 Center: WR-ALC Warner Robins AFB Warner Robins, GA  
 PE 0207134F Team POWER  
 Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: F-15

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

**Description/Justification**  
 This effort provides increased low rotor forward load by relocating the 4th stage seal from near the bore of the 4th disk rim area for the F100-PW-229 engine. Without this forward load set, over- limit vibration will occur. This change reduces replacement of fan and low turbine modules to adjust bearing load. ECP 93QA347.

Aircraft Breakdown: Active 75, Reserve 0, ANG 0

**Development Status**  
 N/A.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	95	0.9	54	0.4	56	0.5						
KITS NONREC												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
OGC							0.1					
TOTAL COST (BP-1100)	95	0.9	54	0.6	56	0.5						
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-6071 4TH DISK BRUSH SEAL  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			205	1.8
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
OGC				0.1
TOTAL COST (BP-1100)			205	1.9

(Totals may not add due to rounding)

Method of Implementation: DEPOT OVERHAUL

Initial Lead Time: 9 Months

Follow-On Lead Time: 9 Months

Milestones

	FY-96	FY-97	FY-98	FY-99	FY-00
Contract Date (Month/CY)	06/96	12/96	12/97	12/98	12/99
Delivery Date (Month/CY)	03/97	09/97	09/98	09/99	09/00

02/15/2000

FY 2001 PBR

Modification Title and No: SUPER CONVECTIVE SHROUD MN-6086

Models of Aircraft Affected: F-15E, -229 ENGINE

Center: WR-ALC Warner Robins AFB Warner Robins, GA

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Appropriation: Aircraft Procurement, Air Force  
CLC: F-15

PE 0207134F Team POWER

**Description/Justification**

The effort provides an airfoil-like convective cooling scheme for the blade outer air seal (BOAS) incorporating six individual cavities which pass air down the length of the cavity to provide convective cooling on the F100-PW-229 engine. Each cavity includes film cooling holes to further augment the heat transfer. This allows the segment to withstand increased gas path temperatures without suffering a loss in oxidation/erosion capability. Mod drives the F-15 rejection rate of 83% down to 0% for each aircraft shroud. This mod is baselined with MNs 6071, 6109, 6052, and 6141. ECP 96QA053.

Aircraft Breakdown: Active 75, Reserve 0, ANG 0

**Development Status**

N/A.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	86	3.6	108	4.3	37	1.5						
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
OGC												
TOTAL COST (BP-1100)	86	3.6	108	4.3	37	1.5						

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-6086 SUPER CONVECTIVE SHROUD  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					231		231	9.4
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
OGC								
TOTAL COST (BP-1100)					231		231	9.4

(Totals may not add due to rounding)

Method of Implementation: DEPOT OVERHAUL

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	<u>FY-96</u>	<u>FY-97</u>	<u>FY-98</u>	<u>FY-99</u>	<u>FY-00</u>
Contract Date (Month/CY)	06/96	12/96	12/97	01/99	12/99
Delivery Date (Month/CY)	06/97	12/97	12/98	01/00	12/00

PE 0207134F Team POWER

## UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-6106 SECONDARY POWER UPGRADE  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS	273	6.3					1,526	19.6
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
MOD OF SPARES								
OGC		0.0						0.1
INSTALLATION OF HARDWARE								
FY-01 599 KITS						[599]		0.0
FY-02 362 KITS						[362]		0.0
FY-03 292 KITS	[292]	0.0				[292]		0.0
FY-04 273 KITS			[273]	0.0		[273]		0.0
TOTAL INSTALL	292	0.0	273	0.0		1,526		0.1
TOTAL COST (BP-1100)	273	6.3		0.0		1,526		19.8

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

#### Milestones

Contract Date (Month/CY)	FY-01	FY-02	FY-03	FY-04	FY-05
12/00	12/01	12/02	12/03	12/04	12/05
Delivery Date (Month/CY)	12/01	12/02	12/03	12/04	12/05

#### Installation Schedule

Quarters	FY-01	FY-02	FY-03	FY-04	FY-05
1	2	3	4	1	2
2	3	4	1	2	3
3	4	1	2	3	4
Input	149	150	150	150	150
Output	149	150	150	150	150

PE 0207134F Team POWER

**TESTING/OPERATION/MAINTENANCE**  
This modification incorporates inside and outside diameter brush seals, addition of cooling holes, and the enlargement of existing holes at discrete locations in the combustor on the F100-PW-229 engine. Provides a significant reduction in projected unscheduled engine removal rates for each airfoil, as well as a reduction in airfoil scrap rates. Modification consists of two separate kits. This mod is baselined with MNs 6052, 6086 and 6141. ECP 96QA053.

Aircraft Breakdown: Active 75, Reserve 0, ANG 0

N/A.

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	86	2.1	108	2.2	37	0.6						
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP		0.2										
OGC												
TOTAL COST (BP-1100)	86	2.3	108	2.2	37	0.6						
(Totals may not add due to rounding)												



(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-6109 FIRST BRUSH SEAL  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					231		231	4.9
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								0.2
SUPPORT-EQUIP								
OGC								
TOTAL COST (BP-1100)					231		231	5.1

(Totals may not add due to rounding)

Method of Implementation: DEPOT OVERHAUL

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-96	FY-97	FY-98	FY-99	FY-00
Contract Date (Month/CY)	12/95	12/96	12/97	01/99	12/99
Delivery Date (Month/CY)	12/96	12/97	12/98	01/00	12/00

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: EAGLE 229 HPT OD FLOWPATH MN-6141  
 Models of Aircraft Affected: F15E 229 ENGINE  
 Center: WR-ALC Warner Robins AFB Warner Robins, GA  
 Appropriation: Aircraft Procurement, Air Force Class P  
 CLC: F-15  
 PE 0207134F Team POWER  
 Exhibit P3A Congressional

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

**Description/Justification**  
 This modification shortens the diffuser case outside diameter (OD) skirt; incorporates a double clevis on the high pressure turbine (HPT) case and provides for bolting the 1st vane to the modified HPT case on the F100-PW-229 engine. These changes eliminate a flow separation in the flow path of the HPT. Eliminates scrap and repair of the HPT case and attachment hardware and greatly reduces the failure rates for the 1st Vane, 1st Blade, 2nd Vane and 2nd Blade. This mod is baselined with MNs 6071, 6109, 6052, and 6086. ECP 96QA053.  
 Aircraft Breakdown: Active 75, Reserve 0, ANG 0

**Development Status**  
 N/A.

**Projected Financial Plan**

		PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
		QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)							
PROCUREMENT (3010)							
INSTALL KITS	83	3.1	108	2.9	27	0.7	
KITS NONREC							
EQUIPMENT							
EQUIP NONREC							
CHANGE ORDERS							
DATA							
SIM/TRAINER							
SUPPORT-EQUIP		0.4					
OGC		0.5		0.5		0.6	
TOTAL COST (BP-1100)	83	4.1	108	3.3	27	1.3	

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-6141 EAGLE 229 HPT OD FLOWPATH

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					218		218	6.7
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								0.4
SUPPORT-EQUIP								1.6
OGC								
TOTAL COST (BP-1100)					218		218	8.7

(Totals may not add due to rounding)

Method of Implementation: DEPOT OVERHAUL

Initial Lead Time: 9 Months

Follow-On Lead Time: 9 Months

Milestones

	FY-96	FY-97	FY-98	FY-99	FY-00
Contract Date (Month/CY)	09/96	12/96	12/97	01/99	01/00
Delivery Date (Month/CY)	06/97	09/97	09/98	10/99	10/00

02/15/2000

FY 2001 PBR

Modification Title and No: COMBUSTER IMPROVEMENTS MN-6142

Models of Aircraft Affected: F15E 229 ENG

Center: WR-ALC Warner Robins AFB Warner Robins, GA

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Appropriation: Aircraft Procurement, Air Force  
CLC: F-15

PE 0207134F

Team POWER

**Description/Justification**

This effort replaces fuel supply tubes prone to fracture and fuel nozzles subject to cracking. Fuel supply tube change includes titanium B-nuts, loop clamps, larger bolts/nuts and safety cable. This mod prevents fractured fuel supply tube and loose connecting hardware from introducing fuel into the augmentor, causing burn-through. 30% of all unscheduled engine removals are caused by fuel manifold supply line failures, loose B-nuts, and broken safetywire. Unstaged and staged fuel nozzles are modified to reduce these risks. ECP 96QA1179 and ECP 96QA110.

Aircraft Breakdown: Active 75, Reserve 0, ANG 0

**Development Status**

N/A.

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

OGC

PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
QTY	COST	QTY	COST	QTY	COST

119	0.6	95	0.6		
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TOTAL COST (BP-1100)

119	0.6	95	0.6		
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(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-6142 COMBUSTER IMPROVEMENTS  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR							214	1.2
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
OGC								

TOTAL COST (BP-1100) 214 1.2  
(Totals may not add due to rounding)

Method of Implementation: DEPOT OVERHAUL  
Initial Lead Time: 3 Months Follow-On Lead Time: 3 Months

**Milestones**

	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	12/98	01/00	12/00	12/01
Delivery Date (Month/CY)	03/99	04/00	03/01	03/02

PE 0207134F Team POWER

(Totals may not add due to rounding)

UNCLASSIFIED

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				124 0.8
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				0.0
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
COM MOD KITS				[258] 0.2
INSTALLATION OF HARDWARE				
FY-00 69 KITS				[69] 0.3
FY-01 45 KITS				[45] 0.2
FY-02 10 KITS				[10] 0.0
TOTAL INSTALL				124 0.5
TOTAL COST (BP-1100)				124 1.5

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 3 Months Follow-On Lead Time: 7 Months

**Milestones**

	FY-00	FY-01	FY-02
Contract Date (Month/CY)	02/00	12/00	12/01
Delivery Date (Month/CY)	05/00	07/01	07/02

**Installation Schedule**

	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4
Input	19 17 18 15	10 15 10 10	10 10 10 10
Output	19 17 18 15	10 15 10 10	10 10 10 10

PE 0207134F Team POWER

Aircraft Breakdown: Active 92, Reserve 0, ANG 0

## (Totals may not add due to rounding)



UNCLASSIFIED

	FY-04 QTY	COST	FY-05 QTY	COST	TO COMP QTY	COST	TOTAL QTY	COST
RD&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							91	2.3
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.0
SIM/TRAINER								
SUPPORT-EQUIP								
TOTAL COST (BP-1100)							91	2.4

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 8 Months

Follow-On Lead Time: 8 Months

**Milestones**

	FY-00	FY-01	FY-02
Contract Date (Month/CY)	03/00	12/00	12/01
Delivery Date (Month/CY)	11/00	08/01	08/02

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: 3RD STAGE FAN IMPROVEMENTS MN-6148  
 Models of Aircraft Affected: F15-229 ENGINE  
 Center: WR-ALC Warner Robins AFB Warner Robins, GA  
 PE 0207134F Team POWER  
 Appropriation: Aircraft Procurement, Air Force Class P  
 Exhibit P3A Congressional

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

**Description/Justification**

This effort provides modified 3rd stage fan blade/disk attachment and 3rd stator vane design to lower operating stress and increase safety margin for the F100-PW-229 engine. Redesigned 3rd stators will eliminate bowwake induced stress on 3rd rotor. This mod will save \$70K per engine per depot visit. Three engines have experienced 3rd disk/blade attachment cracking. Component Improvement Task #11-328R097Z. Cracks were discovered in fielded engines on the 3rd disk attachments. Without corrective action, cracks will lead to liberated blades causing a catastrophic Non-Recoverable Inflight Shutdown (NRIFSD) of the engine. Baseline risk without corrective action is 0.124 NRIFSD/100K Engine Flying Hours. New start notification (1451-1) is currently being staffed for submittal to Congress. No FY00 funds will be obligated for this effort until congressionally-approved.

Aircraft Breakdown: Active 92, Reserve 0, ANG 0

**Development Status**  
 N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)					44	2.3	28	1.4				
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
OGC								0.6				
TOTAL COST (BP-1100)					44	2.3	28	2.0				

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-6148 3RD STAGE FAN IMPROVEMENTS  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					72		72	3.7
KIT'S NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.0
SIM/TRAINER								
SUPPORT-EQUIP								
OGC								0.6
TOTAL COST (BP-1100)					72		72	4.3

(Totals may not add due to rounding)

Method of Implementation: DEPOT OVERHAUL

Initial Lead Time: 1 Month

Follow-On Lead Time: 1 Month

**Milestones**

	FY-00	FY-01
Contract Date (Month/CY)	03/00	12/00
Delivery Date (Month/CY)	04/00	01/01

02/15/2000

FY 2001 PBR

Modification Title and No: APG-63(V)1 RADAR UPGRADE MN-8049

Models of Aircraft Affected: F-15 C/D

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0207130F

Team AIR

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-15 Class P**Description/Justification**

This modification provides significant improvements to the reliability and maintainability of the aging APG-63 radar. The current APG-63 is becoming logistically unsupportable because of parts obsolescence. Modification will ensure the F-15C is the best air superiority aircraft well into the 21st century. This profile uses a form-fit-function sustainment concept vice organic. Installations are done in field by contractor. USAF performs preparation prior to entering contractor mod phase. Due to this, some acft will be inducted into installation line in one quarter but not begin contractor modification until the next quarter.

For FY99, Milestone III decision slipped from Feb 99 to Jul 99 due to OT&E issues.

The APG-63(V)1 program is not dependent on any other program; however, other programs such as Combat ID and APG-63(V)2 radar are dependent on the APG-63(V)1 radar. 18 systems (1 FY97 and 17 in FY98) were transferred to the APG-63(V)2 program. No installation costs were incurred for these systems in FY00 (See FY00 installation).

For the FY06 buy, the program incurs 1 1/2 year production line break resulting in increases in equipment nonrecurring costs.

Aircraft Breakdown: Active 178, Reserve 0, ANG 0

**Development Status**

EMD start Aug 94; DT&E start: Jul 97. LRIP awarded Aug 97. IOT&E effectiveness eval ends Jul 99. IOT&E suitability eval ends Apr 00 MS III decision date was July 99. Full rate production for the FY99 buy was awarded in July 99.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		218.1		0.4								
PROCUREMENT (3010)												
INSTALL KITS	21	1.5	22	1.0	31	1.0	34	1.1	24	0.8	21	0.7
KITS NONRECUR												
EQUIPMENT	[21]	75.2	[22]	80.3	[31]	104.6	[34]	111.2	[24]	89.0	[21]	85.0
EQUIP NONREC		28.7		3.4		8.0						
CHANGE ORDERS				1.0		0.1		1.8		0.2		0.3
DATA		0.3										
SIM/TRAINER												
SUPPORT-EQUIP												
ICS				13.3								
OGC		0.0		0.0		0.0						0.1
INSTALLATION OF HARDWARE												
FY-97			[3]	0.9		[1]						
FY-98						[17]						
FY-99												
FY-00							[22]	2.3				
FY-01							[8]	1.0				
FY-02									[23]	2.5		
FY-03									[12]	1.3	[22]	2.4
FY-06											[7]	0.8
TOTAL INSTALL			3	0.9	18		30	3.3	35	3.8	29	3.2
TOTAL COST (BP-1100)	21	105.7	22	99.8	31	113.8	34	117.5	24	93.8	21	89.3

(Totals may not add due to rounding)

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UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-8049 APG-63V(1) RADAR UPGRADE

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								218.5
PROCUREMENT (3010)								
INSTALL KITS			25	2.0	178	8.2		
KITS NONRECUR								
EQUIPMENT			[25]	115.8	[178]	661.2		
EQUIP NONREC						88.0		
CHANGE ORDERS		1.6			48.0	5.6		
DATA				0.7		0.3		
SIM/TRAINER								
SUPPORT-EQUIP								
ICS						13.3		
OGC						0.1		
INSTALLATION OF HARDWARE								
FY-97							[4]	0.9
4 KITS							[17]	
FY-98							[22]	2.3
17 KITS							[31]	3.4
FY-99							[34]	3.7
22 KITS							[24]	2.7
FY-00							[21]	2.4
31 KITS							[25]	4.1
FY-01								
34 KITS								
FY-02		1.9						
24 KITS	[17]							
FY-03		0.6	[16]	1.8				
21 KITS	[5]							
FY-06								
25 KITS								
TOTAL INSTALL	22	2.5	16	1.8	25	4.1	178	19.5
TOTAL COST (BP-1100)		4.1		2.5	25	169.9	178	796.3
(Totals may not add due to rounding)								

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 18 Months

Follow-On Lead Time: 18 Months

Milestones

Contract Date (Month/CY)

Delivery Date (Month/CY)

Contract Date (Month/CY)

Delivery Date (Month/CY)

Installation Schedule

Quarters

Input

Output

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07	FY-08	FY-09
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
Input															
Output															

Installation Schedule Continued

	FY-03			FY-04			FY-05			FY-06			FY-07			FY-08			FY-09		
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Input	9	8	6	6	6	6	6	5	5	6	6	4				6	6	6	7		
Output	9	9	9	5	6	6	6	4	6	6	6	2									

UNCLASSIFIED

(Continued)

02/15/2000

FY 2001 PBR

Modification Title and No: DIGITAL MAP SYSTEM MN-8237

Models of Aircraft Affected: F-15E

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: WR-ALC Warner Robins AFB Warner Robins, GA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-15 Class P

PE 0207134F Team POWER

# **Description/Justification**

The effort replaces Remote Map Reader with a digital map system (DMS), incorporating R&M improvements. DMS provides a tactical situational display format to the aircrew via the cockpit display system.

Aircraft Breakdown: Active 201, Reserve 0, ANG 0

## **Development Status**

Completed.

## **Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT			21	2.4	52	5.7	88	9.5	40	4.7		
EQUIP NONREC				0.4								
CHANGE ORDERS						0.1		0.5				
DATA												
SIM/TRAINER				0.1	[4]	0.4	[1]	0.1				
SUPPORT-EQUIP					[21]	0.3	[5]	0.1				
PROGRAM MNGMT												
DEPOT								2.0				
ICS						0.1		0.4			0.1	
TOTAL COST (BP-1100)	21		2.9		52	6.7	88	12.6	40	4.8		

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-8237 DIGITAL MAP SYSTEM  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
PROGRAM MNGMT				
DEPOT				
ICS				
TOTAL COST (BP-1100)	201			27.1

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	09/99	12/99	12/00	12/01	12/01
Delivery Date (Month/CY)	09/00	12/00	12/01	12/02	

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UNCLASSIFIED



Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-15 Class P

**Aircraft Breakdown:** Active 253, Reserve 0, ANG 119

### **Projected Financial Plan**

UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-8250 FIGHTER DATA LINK (FDL)  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS			26	1.2			372	13.3
KITS NONRECUR								7.3
EQUIPMENT			[26]	7.3			[372]	72.0
EQUIP NONREC								19.4
CHANGE ORDERS				0.7				1.7
DATA								
SIM/TRAINER							[3]	0.2
SUPPORT-EQUIP								
TRAINING								0.1
CONTRACTOR SUPPORT								0.8
PROGRAM MNGMT				2.0				7.1
OGC								9.3
WARRANTY				0.8				10.5
TOTAL COST (BP-1100)			26	12.0			372	141.8

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 15 Months

Follow-On Lead Time: 15 Months

Milestones

	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
Contract Date (Month/CY)	09/96	12/96	10/98	09/99	06/00					03/05
Delivery Date (Month/CY)	12/97	03/98	01/00	12/00	09/01					06/06

02/15/2000

FY 2001 PBR

Modification Title and No: PROGRAMMABLE ARMAMENT CONTROL SET MN-8265

Models of Aircraft Affected: F-15E

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0207134F Team POWER

Appropriation: Aircraft Procurement, Air Force  
CLC: F-15 Class P

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

**Description/Justification**

The F-15E Programmable Armament Control Set (PACS) upgrade program provides for the installation of the redesigned Converter-Programmer (C-P) and Electronic Sequencing Unit (ESU) subsystems. These redesigns provide the warfighter with required interface capabilities for new smart weapons, computing power to utilize these weapons, improved reliability, maintainability, availability, and supportability. The redesign also includes provisions for future expansion of this weapon stores management system. Suite 4E+/Smart Weapons and Advanced Display Core Processor (ADCP) are dependent on PACS -35 installation. Initial lead time and follow-on lead time increased based on contractor's latest revised estimates. This is partially due to the fact that the use of a FMS customer to accelerate first article delivery failed to materialize.

Aircraft Breakdown: Active 218, Reserve 0, ANG 0

**Development Status**

EMD successfully completed in Jun 99. Production will start as soon as funding is available in FY01. No delay in contracting production is anticipated.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		19.7										
PROCUREMENT (3010)												
INSTALL KITS			14	0.2					28	0.4	51	0.6
KITS NONRECUR				0.2								
EQUIPMENT			[14]	2.9					[28]	5.0	[51]	8.8
EQUIP NONREC				4.2						1.1		
CHANGE ORDERS				0.4						1.0		0.8
DATA				0.4						0.3		0.3
SIM/TRAINER												
SUPPORT-EQUIP										3.3		
WEAPONS UMBILICALS			[70]	0.7					[140]	1.4	[255]	2.7
TRAINING				0.1						0.1		0.1
OGC				0.2						0.2		0.3
ICS				0.2						1.5		1.5
INSTALLATION OF HARDWARE												
FY-01 14 KITS											[14]	0.3
FY-02 28 KITS											[20]	0.4
FY-03 51 KITS												
FY-04 63 KITS												
FY-05 1 KITS												
FY-06 61 KITS												
TOTAL INSTALL											34	0.7
TOTAL COST (BP-1100)			14	9.5					28	14.3	51	15.8

(Totals may not add due to rounding)

UNCLASSIFIED

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								19.7
PROCUREMENT (3010)								
INSTALL KITS	63	0.8	1	0.0	61	0.9	218	2.9
KITS NONRECUR								0.2
EQUIPMENT	[63]	10.7	[1]	0.2	[61]	13.1	[218]	40.7
EQUIP NONREC								5.3
CHANGE ORDERS	0.7		0.1		1.1			4.1
DATA								1.0
SIM/TRAINER								
SUPPORT-EQUIP								3.3
WEAPONS UMBILICALS	[315]	3.4	[5]	0.1	[305]	4.3	[1,090]	12.5
TRAINING		0.1		0.0		0.1		0.6
OGC		0.3		0.0		0.7		1.7
ICS		1.3						4.5
INSTALLATION OF HARDWARE								
FY-01 14 KITS							[14]	0.3
FY-02 28 KITS	[8]	0.2					[28]	0.6
FY-03 51 KITS	[40]	1.1	[11]	0.3			[51]	1.4
FY-04 63 KITS			[45]	1.3	[18]	0.5	[63]	1.8
FY-05 1 KITS					[1]	0.0	[1]	0.0
FY-06 61 KITS					[61]	1.6	[61]	1.6
TOTAL INSTALL	48	1.3	56	1.6	80	2.1	218	5.7
TOTAL COST (BP-1100)	63	18.7	1	2.1	61	22.3	218	82.6

(Totals may not add due to rounding)

Method of Implementation: COMBINATION

Initial Lead Time: 24 Months Follow-On Lead Time: 14 Months

**Milestones**

Contract Date (Month/CY)  
 Delivery Date (Month/CY)

FY-08

FY-07

FY-06

FY-05

FY-04

FY-03

FY-02

FY-01

FY-00

FY-99

FY-98

FY-97

FY-96

**Installation Schedule**

	FY-96		FY-97		FY-98		FY-99		FY-00		FY-01		FY-02		FY-03		
	Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Input																	
Output																	
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
Input	8	10	15	15	11	10	17	18	18	1	5	14	18	18	6		
Output	12	8	10	15	15	11	10	17	18	18	1	5	14	18	18	6	

02/15/2000

FY 2001 PBR

Modification Title and No: AIR DATA PROCESSOR MN-8314

Models of Aircraft Affected: F-15E

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: WR-ALC Warner Robins AFB Warner Robins, GA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-15

PE 0207134F Team POWER

**Description/Justification**

The Air Data Processor (ADP) provides a high quality supportable 2-level maintenance subsystem, and a tailored source for accurate atmospheric sensing, cueing, and weapons delivery. Modification replaces five aging non-supportable avionics subsystems: air data computer, two electronic air inlet controllers, pressure sensor assembly, and flap blow-up switch. It consists of two major phases: the Gp A retrofit kit development and Source Error Correction (SEC) tables development. The concurrency between 3600 and 3010 in FY00 is the remaining development of the SEC as well as flight test. The 3010 ADP production is unrelated to SEC development. The Advanced Display Core Processor (ADCP) Program is dependent upon ADP deliveries. The unit purchase/installation schedule has been changed due to an increase in required installation manhours, going from 73 to 175 hours.

Aircraft Breakdown: Active 201, Reserve 0, ANG 0

**Development Status**

Development of Grp A kit, software integration of ADP, SEC development and flight testing will complete in FY00/1.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)				2.9		1.8						
PROCUREMENT (3010)					38	1.4	24	1.0	28	1.2	28	1.2
INSTALL KITS												
KITS NONRECUR					[38]	2.6	[24]	1.8	[28]	2.1	[28]	2.1
EQUIPMENT												
EQUIP NONREC						0.6		0.1		0.1		0.2
CHANGE ORDERS												
DATA												
SIM/TRAINER							[13]	0.5		0.6		
SUPPORT-EQUIP								0.6		0.2		0.2
WARRANTY										0.2		0.1
OGC						0.1		0.1		0.1		
INSTALLATION OF HARDWARE												
FY-00												
FY-01							[38]	0.6				
FY-02									[24]	0.5		
FY-03											[28]	0.6
FY-04												
FY-05												
FY-06												
TOTAL INSTALL							38	0.6	24	0.5	28	0.6
TOTAL COST (BP-1100)					38	4.7	24	5.2	28	5.3	28	4.4

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-8314 AIR DATA PROCESSOR  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								4.7
PROCUREMENT (3010)								
INSTALL KITS	39	1.7	26	1.2	18	0.8	201	8.6
KITS NONRECUR								
EQUIPMENT	[39]	3.0	[26]	2.1	[18]	1.4	[201]	15.0
EQUIP NONREC								
CHANGE ORDERS		0.1		0.2				1.3
DATA								1.1
SIM/TRAINER							[13]	0.5
SUPPORT-EQUIP								1.2
WARRANTY								0.4
OGC		0.1		0.1				0.6
INSTALLATION OF HARDWARE								
FY-00							[38]	0.6
38 KITS								
FY-01							[24]	0.5
24 KITS								
FY-02							[28]	0.6
28 KITS								
FY-03							[28]	0.6
28 KITS							[39]	0.8
FY-04	[28]	0.6	[39]	0.8			[26]	0.6
39 KITS							[18]	0.4
FY-05								
26 KITS								
FY-06								
18 KITS								
TOTAL INSTALL	28	0.6	39	0.8	44	0.9	201	3.9
TOTAL COST (BP-1100)	39	5.5	26	4.3	18	3.2	201	32.6
(Totals may not add due to rounding)								

Method of Implementation: COMBINATION

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07	FY-08
Contract Date (Month/CY)		06/00	12/01	12/02	12/02	12/03	12/04	12/05		
Delivery Date (Month/CY)		06/01	12/01	12/02	12/03	12/04	12/05	12/06		

**Installation Schedule**

	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07	FY-08
Quarters	1	2	3	4	1	2	3	4	1	2
Input					19	19	6	6	7	7
Output						19	19	6	6	6
Quarters	1	2	3	4	1	2	3	4	1	2
Input	4	4	5	5					7	7
Output	7	4	4	5					7	7

02/15/2000

FY 2001 PBR

Modification Title and No: JOINT HELMET-MOUNTED CUEING SYSTEM MN-8352

Models of Aircraft Affected: F-15 C/D

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0207130F Team AIR

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: F-15

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

**Description/Justification**

The helmet cueing system provides capability for weapons employment to achieve first look, first shot advantage in air-to-air within visual range (WVR) combat arena. The state of the art system provides the capability to cue and verify cueing of off-boresight sensors and weapons, including the radar, navigation system, and both current and next generation short range missiles (SRM). The helmet provides radar weapon symbology and visual cues of target location. The production program has experienced some cost growth, because of procurement of cockpit mappers, an increased equipment warranty, and a larger than anticipated Group A and B hardware suite.

Aircraft Breakdown: Active 279, Reserve 0, ANG 0

**Development Status**

PDR and CDR completed FY98/4. Flight Test /DTE FY98/3 through FY00/1. Operational Testing complete FY00/3. During development, the finished product will be a qualified high off-boresight system which entails a combination of the helmet and the AIM 9X missile.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		4.1		5.3		1.9						
PROCUREMENT (3010)												
INSTALL KITS					6	0.3			43	1.5	78	2.5
KITS NONRECUR					[6]	1.1			[43]	6.9	[78]	12.0
EQUIPMENT						0.2						
EQUIP NONREC						0.5				1.2		2.8
CHANGE ORDERS						0.5				0.4		0.9
DATA												
SIM/TRAINER					[2]	2.0			[3]	3.5		1.2
SUPPORT-EQUIP						0.4				2.5		0.3
OGC						0.3				0.1	[1]	0.1
TRAINING												
WARRANTY						0.3				1.7		2.3
INSTALLATION OF HARDWARE												
FY-01												
FY-02									[6]	0.2		
FY-03											[43]	1.6
FY-04												
FY-05												
FY-06												
TOTAL INSTALL									6	0.2	43	1.6
TOTAL COST (BP-1100)									6	5.5	43	18.3
(Totals may not add due to rounding)											78	23.7

(Continued)

UNCLASSIFIED

**(Continued)**

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	<u>COST</u>	QTY	<u>COST</u>	QTY	<u>COST</u>	QTY	<u>COST</u>
RDT&E (3600)								11.4
PROCUREMENT (3010)								
INSTALL KITS	11	0.4	100	3.3	41	1.4	279	9.4
KITS NONREC								
EQUIPMENT	[11]	1.8	[100]	15.9	[41]	6.7	[279]	44.4
EQUIP NONREC								0.2
CHANGE ORDERS		1.0		0.1		0.5		6.1
DATA		0.2		1.1		0.6		3.7
SIM/TRAINER							[5]	5.5
SUPPORT-EQUIP		1.7		2.2		2.2		10.2
OGC		0.3		0.3		0.6		2.1
TRAINING				0.2		0.1	[1]	0.5
WARRANTY		0.2		1.0				5.5

## INSTALLATION OF HARDWARE

FY-01	6 KITS					[6]	0.2
FY-02	43 KITS					[43]	1.6
FY-03	78 KITS	[78]	3.0			[78]	3.0
FY-04	11 KITS			[11]	0.5	[11]	0.5
FY-05	100 KITS					[100]	3.9
FY-06	41 KITS					[41]	1.6
TOTAL INSTALL		78	3.0	11	0.5	141	5.5
TOTAL COST (BP-1100)		11	8.6	100	24.6	41	17.6
(Totals may not add due to rounding)						279	98.4

## Method of Implementation: COMBINATION

**Initial Lead Time: 12 Months**

**Follow-On Lead Time: 12 Months**

## Milestones

[illegible]

## Installation Schedule

[illegible]



02/15/2000

FY 2001 PBR

Modification Title and No: ALQ 135, BAND 1.5 MN-8419

Models of Aircraft Affected: F-15E

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: WR-ALC Warner Robins AFB Warner Robins, GA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: F-15

PE 0207134F Team POWER

**Description/Justification**

Modification provides low/mid band jamming capability against electronic threats. It will be integrated with the ALQ-135 Band 3 Internal Countermeasures Set and ALR56C Radar Warning Receiver (RWR) to provide full threat coverage. A Band 1.5 system consists of one Control Oscillator (CO) and two RF Amplifiers (RFA). Support Equipment costs include five Band 1.5 Special Purpose Authorized to Maintenance (SPRAM) shipsets. One SPRAM shipset consists of one CO and one RFA. SPRAM units are 'golden boxes' utilized by maintenance to troubleshoot and analyze failures in the field.

Aircraft Breakdown: Active 164, Reserve 0, ANG 0

**Development Status**

Hardware development is complete. Integration with ALR-56C RWR and Initial Development Flight Test was completed. Initial RDT&E EMD FY97/2-FY99/2. In over 250 hours of ground and flight testing, there have been no Band 1.5 hardware failures. Initial IOT&E (FY99/3-FY99/4) identified opportunities to improve software performance of the system. The Band 1.5 program was restructured to incorporate these improvements prior to fielding. A second LRIP was executed in FY00 (Congressional notification being accomplished) based upon outstanding hardware performance. Second phase of IOT&E is scheduled to be conducted in FY00/3. Milestone III has slipped to FY01/1.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		31.0		7.5		3.9						
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT	12	23.8	15	30.0	14	28.4	35	64.7	29	48.7		
EQUIP NONREC		0.3										
CHANGE ORDERS		0.1		0.3				0.3		0.2		
DATA												
SIM/TRAINER				0.5		0.5		9.5		2.2		0.5
SUPPORT-EQUIP				0.3		0.8		0.9		0.2		0.4
OGC				0.5		1.0		2.3		2.8		1.2
GFE						0.1		0.1		0.6		0.4
CONTRACT SUPPORT						0.3		0.3				
ICS												
TOTAL COST (BP-1100)	12	25.0	15	33.0	14	41.8	35	70.7	29	51.3		

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-8419 ALQ 135, BAND 1.5

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								42.5
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR	59	93.5			164	289.1		
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA		0.2				0.3		1.3
SIM/TRAINER		1.9				14.7		
SUPPORT-EQUIP		0.3				2.9		
OGC		1.5				9.2		
GFE		0.7				1.9		
CONTRACT SUPPORT						0.6		
ICS								
TOTAL COST (BP-1100)	59	98.1			164	320.0		

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)			02/99	12/99	12/00	12/01	12/02	12/03
Delivery Date (Month/CY)			12/99	12/00	12/01	12/02	12/03	12/04

02/15/2000

FY 2001 PBR

Modification Title and No: FDL LINK 16 MN-8420

Models of Aircraft Affected: F-15E

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: WR-ALC Warner Robins AFB Warner Robins, GA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: F-15

PE 0207134F Team POWER

**Description/Justification**

The Fighter Data Link (FDL) 16 modification provides the F-15E a tactical data link radio which significantly improves operational effectiveness by providing real time, jam resistant digital data and voice transfer capability. This modification integrates the capability of Fighter Data Link integration and Joint Tactical Information Distribution System (JTIDS) Link 16 programs. This is a Leader/Follower Program with FDL being the leader and Link 16 being the follower.

Aircraft Breakdown: Active 218, Reserve 0, ANG 0

**Development Status**

RD1&E : Study FY97/2-FY98/1; EMD/Integr FY98/1 - FY99/1 (complete)

**Projected Financial Plan**

RD1&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

OGC

TRAINING

PROGRAM MNGMT

WARRANTY

PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST

14.6

4.8

83

2.9

47

1.7

[83]

15.4

[47]

9.8

0.5

0.3

0.7

0.6

0.3

1.3

1.8

0.3

0.3

1.0

TOTAL COST (BP-1100)

83

23.4

47

13.5

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-8420 FDL LINK 16  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								19.4
PROCUREMENT (3010)								
INSTALL KITS	73	2.9			15	0.7	218	8.2
KITS NONREC								
EQUIPMENT	[73]	18.0			[15]	4.2	[218]	47.4
EQUIP NONREC								
CHANGE ORDERS		0.5				0.4		1.8
DATA								
SIM/TRAINER								
SUPPORT-EQUIP		0.5						0.7
OGC		0.2						1.4
TRAINING								0.8
PROGRAM MNGMT						1.0		2.3
WARRANTY						0.5		3.3
TOTAL COST (BP-1100)	73	22.2			15	6.7	218	65.8
(Totals may not add due to rounding)								

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 15 Months

Follow-On Lead Time: 15 Months

**Milestones**

Contract Date (Month/CY)	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06
Delivery Date (Month/CY)				06/00	06/01	09/02		06/04	09/05	06/06
				09/01						09/07

02/15/2000

FY 2001 PBR

Modification Title and No: ACFT WEAPONS CONTROL SET (AWCTS)/ AIM 9X MN-8454

Models of Aircraft Affected: F-15 C/D

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: WR-ALC Warner Robins AFB Warner Robins, GA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-15 Class P

PE 0207130F Team AIR

**Description/Justification**

The AWCTS is used during flight line maintenance to perform functional and fault isolation /detection for the USAF F-15 MSIP Aircraft Weapons Delivery System. This upgrade allows the system to test AIM-9X configured weapons delivery system.

This modification will also acquire the non-recurring engineering associated with the upgrade of the A/E24T-199 Armament Circuit Preload Test Set (ACPTS). The tester also requires modification to become compatible with the F-15 MSIP AIM-9X weapons delivery system. With this modification, we will acquire 115 T-169 kits and 10 T-199 kits.

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

**Development Status**

N/A.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KIT'S NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
OGC												
TOTAL COST (BP-1100)												
(Totals may not add due to rounding)												

[125] 1.7

1.7

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RD&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
OGC								
TOTAL COST (BP-1100)								
(Totals may not add due to rounding)								

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 12 Months

Follow-On Lead Time: 0 Months

Milestones

	FY-00
Contract Date (Month/CY)	01/00
Delivery Date (Month/CY)	01/01

UNCLASSIFIED

UNCLASSIFIED

FY-04		FY-05		TO COMP		TOTAL	
QTY	COST	QTY	COST	QTY	COST	QTY	COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

AIRCRAFT

0.0	0.0	0.7	0.0	11.1
-----	-----	-----	-----	------

0.0	0.0	0.7	0.0	11.1
-----	-----	-----	-----	------

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-92

Contract Date (Month/CY)

Delivery Date (Month/CY)



02/15/2000

FY 2001 PBR

Modification Title and No: FM IMMUNITY MN-DC101

Models of Aircraft Affected: E

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: WR-ALC Warner Robins AFB Warner Robins, GA

Appropriation: Aircraft Procurement, Air Force  
CLC: F-15

PE 0207134F Team POWER

**Description/Justification**

The Marconi MLR-2010 is a protected Instrument Landing System which is ICAO-compatible for civil and military ILS use and contains provisions for growth to include the Microwave Landing System (MLS) as well as local and global differential GPS accuracy improvements. It accepts plug-in upgrade kits to provide any combination of MLS, 1553, and GPS modes. The Marconi MLR-2010 is form, fit, and function replacement for ARN-108 and ARN-112. The requirement is for 218 F-15E aircraft.

This is not a New Start. FY00 funding for effort resulted from a Congressional Appropriations Committee plus-up for GATM efforts, one of which is FM Immunity. FY00 funds are currently on withhold pending OSD approval of the spending plan.

Aircraft Breakdown: Active 80, Reserve 0, ANG 0

**Development Status**

N/A.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONREC					55	2.1	25	1.0				
EQUIPMENT						1.0						
EQUIP NONREC						0.1		0.1				
CHANGE ORDERS						0.0		0.0				
DATA												
SIM/TRAINER						0.1		0.0				
SUPPORT-EQUIP												
TOTAL COST (BP-1100)					55	3.4	25	1.1				

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-15 MN-DC101 FM IMMUNITY  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR					80			3.1
EQUIPMENT								1.0
EQUIP NONREC								0.2
CHANGE ORDERS								0.1
DATA								
SIM/TRAINER								0.1
SUPPORT-EQUIP								
TOTAL COST (BP-1100)					80			4.5

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

Milestones

	FY-00	FY-01
Contract Date (Month/CY)	08/00	12/00
Delivery Date (Month/CY)	08/01	12/01

## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: F-16			
	1999	2000	2001	2002	2003	2004
						2005
<b>COST (In Mil)</b>	\$256.402	\$283.060	\$248.830	\$255.311	\$246.082	\$193.072

This line item funds modifications to the F-16 aircraft. The F-16 is a multi-role fighter capable of employing a wide variety of nuclear and conventional weapons and missiles in both the air-to-surface and air-to-air mission areas. The overall goal of the modifications budgeted in FY01 is to increase flying safety, combat capability, reliability, maintainability, and provide for structural improvements to the airframe to ensure meeting the projected 8000 hour service life and permit replacement of the F-16 beginning approximately 2015. The primary mods in FY01 are Block 40/50 upgrades. The specific modifications budgeted and programmed are below.

CLASS P-S	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
	18503A	WING BEEF-UP	0.2	0.6							11.3
	99999A	LOW COST SAFETY MO	0.6	0.8	0.1	0.1	0.1	0.2	0.1		3.6
	99999Y	LOW COST ENGINE SA	0.1	0.8	0.1	0.1	0.1	0.2	0.1		3.9
TOTAL FOR CLASS P-S											
P	1591	600 GALLON EXTERNAL	0.8	2.2	0.2	0.2	0.2	0.4	0.2	0.0	18.8
	173009	F110 DIGITAL ENGINE	4.0	2.5							17.3
	19229E	FALCON 229 ENGINE U	24.1	32.4	14.3	9.9	8.5	3.9	0.4		161.2
	3088	RADAR WARNING REC	0.6	1.6	1.0	0.9	1.6				13.9
	3090	ALR-56M RCPU Upgrade	0.3								160.3
	3091	ALR-56M Analysis Proce	1.3	0.8	0.7	0.1					17.0
	3150M	NAVSTAR GPS F-16	2.0								2.0
	3450	ALE-47	18.2	18.9	9.6	3.6					108.8
	4260	ADVANCED WEAPON I	2.5	1.5	1.8						40.3
	4262	DIGITAL TERRAIN SYST	2.0	2.5	2.0	4.0	4.0	4.0	4.0	10.5	54.6
	5013	RF TOWED DECOY SYS	3.6	10.0							25.1
	52338B	MAIN AIRCRAFT BATTE	37.8	18.2	6.0	5.1	17.8	6.2			148.2
			1.3								2.6

Totals may not add due to rounding.

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)					DATE February 2000		
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: F-16				
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005
	\$256.402	\$283.060	\$248.830	\$255.311	\$246.082	\$240.827	\$193.072

This line item funds modifications to the F-16 aircraft. The F-16 is a multi-role fighter capable of employing a wide variety of nuclear and conventional weapons and missiles in both the air-to-surface and air-to-air mission areas. The overall goal of the modifications budgeted in FY01 is to increase flying safety, combat capability, reliability, maintainability, and provide for structural improvements to the airframe to ensure meeting the projected 8000 hour service life and permit replacement of the F-16 beginning approximately 2015. The primary mods in FY01 are Block 40/50 upgrades. The specific modifications budgeted and programmed are below.

CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
	570051	RELOCATE FORWARD	0.5	0.2							12.6
	58006A	WOW SWITCH		0.1	0.1						3.0
	58044B	CHAFF/FLARE PROGRA	0.1	0.1	0.1						2.4
	6020	SCREECH / EXHAUST D	6.3	6.4							12.7
	602030	BLOCK 30 NIGHT VISIO	10.1	9.3	7.2	1.9	0.2				34.9
	602039	BLOCK 42 CAS IMPROV		5.2	4.9						10.1
	602040	BLK 40/50 NIGHT VISIO	14.5	18.1	21.4	8.9					68.6
	602041	BLOCK 40 CAS IMPROV	4.0	16.4	5.3						30.8
	602140	BLK 40 MODULAR MISSI				14.9	18.5	72.7	60.3	164.6	331.0
	602150	BLK 50 MODULAR MISSI	24.9	39.6	50.5	44.1	30.7	8.6	4.7		203.0
	6022	PRE BLK 40 STRUCTUR	21.2	11.8	1.9						197.9
	602240	BLOCK 40 STRUCTURA	5.9	4.0							76.0
	602241	F-16A STRUCTURE IMP		1.0	2.9	3.1	3.1				10.2
	602250	BLOCK 50/52 STRUCTU			1.0	2.8	4.0				7.9
	603030	ALQ-213 COUNTERMEA	9.6	11.8	6.0	2.3					29.7
	610240	BLOCK 40 COLOR DISP				10.7	10.9	47.2	38.7	105.2	212.7

Totals may not add due to rounding.

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)					DATE February 2000		
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: F-16				
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005
	\$256.402	\$283.060	\$248.830	\$255.311	\$246.082	\$240.827	\$193.072

This line item funds modifications to the F-16 aircraft. The F-16 is a multi-role fighter capable of employing a wide variety of nuclear and conventional weapons and missiles in both the air-to-surface and air-to-air mission areas. The overall goal of the modifications budgeted in FY01 is to increase flying safety, combat capability, reliability, maintainability, and provide for structural improvements to the airframe to ensure meeting the projected 8000 hour service life and permit replacement of the F-16 beginning approximately 2015. The primary mods in FY01 are Block 40/50 upgrades. The specific modifications budgeted and programmed are below.

MOD CLASS	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
610250	BLOCK 50 COLOR DISP	16.2	25.4	32.8	28.2	20.9	5.5	3.0		132.0
610330	BLOCK 30 ENHANCED	9.0	4.7	4.4						18.1
612150	BLOCK 50 AIR-TO-AIR I		9.9	34.9	49.2	30.3	2.0	1.2		127.4
6300	ON BOARD OXYGEN G		3.0							3.0
6400	BLOCK 50 IMPROVED A	0.8	1.3							11.4
650040	BLOCK 40 JOINT HELM					6.0	25.7	20.9	58.1	110.7
650050	BLOCK 50 JOINT HELM			11.3	20.7	26.7	6.0	8.3		72.9
661640	BLOCK 40 LINK 16 - CCI					12.0	51.1	40.3	93.3	196.8
661650	BLOCK 50 LINK 16 - CCI			18.7	42.6	47.4	6.3	10.5		125.5
99999E	MISC ENGINE UPDATE	0.2	0.8	0.1	0.1	0.1	0.2	0.1		4.5
99999U	LOW COST RETROFIT	1.7								5.3
99999X	LOW COST MODIFICATI	1.5								7.4
DC101	FM IMMUNITY		3.1	2.0						5.1
F16PTS	ANG/AFRES TARGETIN	23.0								23.0
F16TAR	THEATER AIRBORNE R		6.6							6.6
F18001	F110-GE-100/129 #4 BE		1.8	1.4	0.4					3.5

Totals may not add due to rounding.

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)				DATE February 2000			
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications		P-1 ITEM NOMENCLATURE: F-16					
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005
	\$256.402	\$283.060	\$248.830	\$255.311	\$246.082	\$240.827	\$193.072

This line item funds modifications to the F-16 aircraft. The F-16 is a multi-role fighter capable of employing a wide variety of nuclear and conventional weapons and missiles in both the air-to-surface and air-to-air mission areas. The overall goal of the modifications budgeted in FY01 is to increase flying safety, combat capability, reliability, maintainability, and provide for structural improvements to the airframe to ensure meeting the projected 8000 hour service life and permit replacement of the F-16 beginning approximately 2015. The primary mods in FY01 are Block 40/50 upgrades. The specific modifications budgeted and programmed are below.

CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
F18002		F110 MEC	0.1								0.6
F18003		F110 EXHAUST NOZZLE	0.5								1.9
F19401		-229 HPT OD FLOWPAT	0.2	0.6	0.3	0.3	0.4				1.9
F19407		F110-GE-100 T4B PYRO		0.5	0.5	0.6	1.0	1.1	0.5		4.1
F19410		F110 DEC HARDWARE	0.9	1.6	0.9						4.0
F19411		F100 IMPROVED TURBI	0.1								0.1
F19412		F110-GE-129 EMS IMPR		2.4	1.7						4.1
F19413		GE-129 TURBINE FRAM		0.8	0.8	0.8	0.8				3.2
F19450		PW-229 FUEL NOZZEL		0.2	0.3	0.2	0.1				0.8
F19451		PW-229 3rd STAGE FAN		0.3	1.1	0.1	1.0				2.6
F19452		PW-229 2nd STAGE FAN		0.3	1.0						1.3
F19453		F100 ENHANCED MAINT		0.1	0.1						0.2
F19454		PW-229 IMPROVED DU		0.2							0.2
F19455		PW-229 DEEC LOGIC 2.			0.1						0.1
Z88888		REPROGRAMMINGS	6.7	5.3							12.0
TOTAL FOR CLASS P			255.8	281.0	249.2	255.4	246.1	240.4	193.0	431.7	2,885.0

Totals may not add due to rounding.

		P-1 SHOPP LIST ITEM NO. 34	PAGE NO. 4
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BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)	DATE February 2000
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This line item funds modifications to the F-16 aircraft. The F-16 is a multi-role fighter capable of employing a wide variety of nuclear and conventional weapons and missiles in both the air-to-surface and air-to-air mission areas. The overall goal of the modifications budgeted in FY01 is to increase flying safety, combat capability, reliability, maintainability, and provide for structural improvements to the airframe to ensure meeting the projected 8000 hour service life and permit replacement of the F-16 beginning approximately 2015. The primary mods in FY01 are Block 40/50 upgrades. The specific modifications budgeted and programmed are below.

TOTAL FOR AIRCRAFT F-16

Totals may not add due to rounding.		P-1 SHOPP LIST ITEM NO. 34	PAGE NO. 5
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02/15/2000

FY 2001 PBR

Modification Title and No: 600 GALLON EXTERNAL FUEL TANKS MN-1591

Models of Aircraft Affected: BLOCK 50/52

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16 Class P

PE 0207133F Team POWER

**Description/Justification**

The 600 gallon tank mod will provide enhanced range/loiter capability for a small number of Block 50/52 F-16s performing Suppression of Enemy Air Defenses (SEAD) (force protection) missions in PACAF/USAFE. SEAD mission accomplishment will continue to be constrained by range and loiter time limitations if mod not accomplished. Five of the FY-96 buy tanks and one of the FY-99 buy tanks were and will continue to be used for flight test. The aircraft breakdown is half of the 192 tank kits remaining after flight test as each aircraft is equipped with two tanks.

Aircraft Breakdown: Active 96, Reserve 0, ANG 0

**Development Status**

Completed.

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

GFE

	PRIOR QTY	COST	FY-99 QTY	COST	FY-00 QTY	COST	FY-01 QTY	COST	FY-02 QTY	COST	FY-03 QTY	COST
		2.1										
145	9.8		53	3.5								2.5
				0.5								
		0.6										
		0.1										
[68]	0.3											
TOTAL COST (BP-1100)	145	10.8	53	4.0								2.5

(Totals may not add due to rounding)



(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-1591 600 GALLON EXTERNAL FUEL TANKS  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								2.1
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR					198	15.8		
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA					0	1.1		
SIM/TRAINER								
SUPPORT-EQUIP					[68]	0.1		
GFE						0.3		
TOTAL COST (BP-1100)					198	17.3		

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 9 Months

Follow-On Lead Time: 9 Months

**Milestones**

	FY-96	FY-97	FY-98	FY-99
Contract Date (Month/CY)	09/96	09/99	09/99	09/99
Delivery Date (Month/CY)	06/97	06/00	06/00	06/00

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16 Class P  
PE 0207133F Team POWER

(Totals may not add due to rounding)

UNCLASSIFIED

UNCLASSIFIED

	FY-04 QTY	COST	FY-05 QTY	COST	TO COMP QTY	COST	TOTAL QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR	12	2.1					768	117.6
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.9
SIM/TRAINER								
SUPPORT-EQUIP								2.5
MOD OF SPARES						[186]		5.0
DEPOT PROCESS		1.9		0.4				15.0
EMSC UPGRADE								0.4
MEC UPGRADE								
MEC KIT						[842]		19.9
TOTAL COST (BP-1100)	12	3.9		0.4			768	161.2

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)	06/95	06/95	06/95	12/95	02/97	02/98	12/98	12/99	12/00	12/01	12/02	12/03
Delivery Date (Month/CY)	06/96	06/96	06/96	12/96	02/98	02/99	12/99	12/00	12/01	12/02	12/03	12/04

02/15/2000  
FY 2001 PBR  
Modification Title and No: FALCON 229 ENGINE UPGRADE MN-19229E  
Models of Aircraft Affected: BLOCK 52

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT  
Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16  
PE 0207133F Team POWER

**Description/Justification**  
The Falcon 229 program is designated to enhance safety and improve maintainability by accelerating F-16F100-PW-229 engine maturation. This will be accomplished through design improvements, early identification of problems, and augmented field support. The design improvement portion of Falcon 229 is comprised of four blocks, phased to coincide with the 4th stage blade retrofits. Each block consists of multiple upgrades that affect install engines, spare engines, and spare modules, consequently the number of kits and cost varies between blocks. Incorporation of all the tasks will reduce the in-flight shut down rate to 2/100,000 engine flying hours. This means six aircraft and possibly crews will be saved every 100,000 fleet hours. Installation in FYs 94, 95, and 96 were organizational level, requiring no installation funds. Remaining years are depot installation. FY98-FY04 installations are accomplished concurrently with the Falcon 229 HPT OD Flow path modification MN-F19401 at depot as part of scheduled maintenance (no installation dollars required). The mod is required for installed engine, spare engines and spare components (not installed).

Aircraft Breakdown: Active 44, Reserve 0, ANG 21

**Development Status**  
Completed.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		6.5										
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR	1,256	5.7	9	0.6	20	1.4	10	0.7	7	0.5	16	1.4
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA		0.2										
SIM/TRAINER												
SUPPORT-EQUIP		2.5										
MOD OF SPARES					[4]	0.3	[4]	0.3	[4]	0.3	[2]	0.2
INSTALLATION OF HARDWARE												
FY-94 927 KITS												
FY-95 320 KITS												
FY-96 6 KITS												
FY-98 3 KITS												
FY-99 9 KITS												
FY-00 20 KITS												
FY-01 10 KITS												
FY-02 7 KITS												
FY-03 16 KITS												
TOTAL INSTALL												
TOTAL COST (BP-1100)	1,256	8.3	9	0.6	20	1.6	10	1.0	7	0.9	16	1.6

(Totals may not add due to rounding)

	FY-04	FY-05	TOTAL	
	QTY	COST	QTY	COST
RDT&E (3600)				6.5
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR			1,318	10.3
EQUIPMENT				
EQUIP NONREC				0.2
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				2.5
MOD OF SPARES			[14]	1.0
INSTALLATION OF HARDWARE				
FY-94 927 KITS				
FY-95 320 KITS				
FY-96 6 KITS				
FY-98 3 KITS				
FY-99 9 KITS				
FY-00 20 KITS				
FY-01 10 KITS				
FY-02 7 KITS				
FY-03 16 KITS				
TOTAL INSTALL				
TOTAL COST (BP-1100)			1,318	13.9
(Totals may not add due to rounding)				

Method of Implementation: COMBINATION

Initial Lead Time: 12 Months Follow-On Lead Time: 12 Months

Milestones

Contract Date (Month/CY)	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Delivery Date (Month/CY)	09/94	03/95	03/96	03/97	03/98	02/99	12/99	12/00	12/01	12/02	12/03

Installation Schedule

	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input								
Output								
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	4 3 3	3 2 2	2 2 2	2 5 5	4 4 4	5 5 5	5 5 5	5 5 5
Output	4 3 3	3 2 2	2 2 2	2 5 5	4 4 4	5 5 5	5 5 5	5 5 5

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

02/15/2000  
FY 2001 PBR  
Modification Title and No: ALR-56M RCPU Upgrade MN-3090  
Models of Aircraft Affected: F-16 Block 40/42/50/52

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16  
PE 0207133F  
Team POWER

Center: ASC - Wright Patterson AFB, OH

**Description/Justification**

This retrofit replaces the CPU in the Analysis Processor (LRU-5) of the ALR-56M to improve system memory and reduce processing time. The replacement computer (RCPU) contract buys mod kits that consist of a new commercial off-the-shelf (COTS) CPU and four jumper boards to constitute a form, fit, function replacement for the old CPU. The baseline software was rehosted ADA to accommodate the COTS CPU. A total of 740 kits were purchased for 475 aircraft with the remaining 265 required to modify spares.

**Notes:**

Lockheed-Martin Fairchild Systems (LMFS), as the design agent for the ALR-56M, provides system integration, logistics support, engineering, configuration control, test, repair/retrofit, and computer software updates accomplished under separate contract modifications. Because LMFS is the design agent for the ALR-56M, a contract with LMFS was issued to purchase the engineering change proposal (ECP) for a replacement computer that is specifically designed for the ALR-56M architecture. RCPU replacement computer procurement includes the modification to existing spares.

The second contract award also purchases engineering support/installation of all replacement computer kits in ALR-56M ARWR Analysis Processors with the contractor being held contractually responsible for their installed performance. Because they are responsible for system level test performance, LMFS will warrant the deliverable kits through their installation in fielded ALR-56M systems. This approach is consistent with and fully supports performance based acquisition initiatives.

This mod is funded to include installation of the new Back Plane Assembly (BPA), MN-3091.... The primary program constraint is to ensure that the replacement computer (RCPU) modification effort aligns with the Block 50T5 core avionics upgrade schedule so that ALR-56M OFP version 0040 can be fielded. Due to delays in fielding Operational Flight Program 50T5, this effort has incurred OGC that will allow the user to receive new BPAs with the old computers starting in FY99.

Aircraft Breakdown: Active 442, Reserve 0, ANG 33

**Development Status**  
N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	740	12.7										
KITS NONREC		1.5										
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
MOD OF SPARES												
OGC					[50]	0.1	[150]	0.2	[65]	0.1		
ECP/COMPUTER						0.3						
						0.6						
						0.7						

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-3090 ALR-56M RCPU Upgrade

Projected Financial Plan Continued

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
INSTALLATION OF HARDWARE												
FY-95 250 KITS					[150]	0.3	[300]	0.5	[25]	0.0		
FY-96 490 KITS												
TOTAL INSTALL			150	0.3			300	0.5	25	0.0		
TOTAL COST (BP-1100)	740		1.3	0.8				0.7		0.1		

(Totals may not add due to rounding)

UNCLASSIFIED

Fact Sheet: F-16 MN-3090 ALR-56M RCPU Upgrade  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							740	12.7
KITS NONRECUR								1.5
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
MOD OF SPARES								
OGC								
ECP/COMPUTER							[265]	0.4
INSTALLATION OF HARDWARE								1.0
FY-95 250 KITS								0.7
FY-96 490 KITS							[150]	0.3
TOTAL INSTALL							[325]	0.5
							475	0.8
TOTAL COST (BP-1100)							740	17.0

(Totals may not add due to rounding)

Method of Implementation: DEPOT FIELD TEAM

Initial Lead Time: 3 Months

Follow-On Lead Time: 3 Months

Milestones

Contract Date (Month/CY) 05/96 01/98  
Delivery Date (Month/CY) 08/96 04/98

Installation Schedule

	FY-95		FY-96		FY-97		FY-98		FY-99		FY-00		FY-01		FY-02	
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Input																
Output																



02/15/2000  
FY 2001 PBR  
Modification Title and No: ALR-56M Analysis Processor BPA MN-3091  
Models of Aircraft Affected: F-16 Blocks 40/42/50/52

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16  
PE 0207133F  
Team POWER

Center: ASC - Wright Patterson AFB, OH

**Description/Justification**  
This mod contains the procurement of new Back Plane Assemblies (BPA). For the past several years the AN/ALR-56M Radar Warning Receiver has had a low Mean Time Between Failure and a high No Failure Found (NFF) rate. Recent analyses by the Government indicate that corrosion forming within the Analysis Processor (AP) is a major contributor to the high failure rates and high NFF rates of the AP LRU. Significant corrosion is forming on non-conformally coated backplane assemblies (BPA) within the AP. WR-ALC depot maintenance technicians have found that corrosion on the BPA is, in most cases, the cause of equipment failure. In addition to the corrosion problem, the current 'multi-wire technology' BPA has been experiencing a 33% condemnation rate due to a significant number of 'open circuits' within the BPA. Like corrosion damage, these defects ('opens') cause intermittent failures, contributing to the high AP NFF rates and Mission Incapable-Parts (MICAP) hours. Under this modification, Lockheed-Martin Fairchild Systems (LMFS) shall generate a Class I Engineering Change Proposal (ECP) for the replacement of the current non-conformally coated, multi-wire technology BPA with a fully conformally coated Trace Multilayer BPA. The new Trace BPA shall be coated IAW ECN # 65932 and 65993.

NOTE 1: Total procurement of BPA replacement computer will exceed required installation quantities for Blk 40/50 aircraft to include modification of existing spares.

NOTE 2: There is no installation cost associated with procurement of new BPAs, as installation funding for this mod is associated with MN-3090 and will be part of the RCPU/BPA retrofit scheduled to occur for Block 40 and Block 50 aircraft.

NOTE 3: FY99 MISC funds were used for a 15K moisture study and 135K water shields (Total = \$150K). These actions resulted in a savings by offsetting the need for 2.0M in FY01 for SHC BPA moisture intrusion fix

Aircraft Breakdown: Active 717, Reserve 0, ANG 33

	<u>Development Status</u>		N/A	
	<u>Projected Financial Plan</u>			
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONREC				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
MISC				
INSTALLATION OF HARDWARE				
FY-99 750 KITS				
TOTAL INSTALL				
TOTAL COST (BP-1100)				
(Totals may not add due to rounding)				

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-3091 ALR-56M Analysis Processor BPA  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)							750	1.8
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
MISC								0.1
INSTALLATION OF HARDWARE								
FY-99 750 KITS							[750]	
TOTAL INSTALL							750	
TOTAL COST (BP-1100)							750	2.0

(\*Totals may not add due to rounding)

Method of Implementation: DEPOT FIELD TEAM

Initial Lead Time: 8 Months

Follow-On Lead Time: 12 Months

Milestones

FY-98 FY-99 FY-00 FY-01 FY-02  
Contract Date (Month/CY) 11/98  
Delivery Date (Month/CY) 07/99

Installation Schedule

Quarters	FY-98		FY-99		FY-00		FY-01		FY-02	
	1	2	3	4	1	2	3	4	1	2
Input					95	95	95	90	90	100
Output						95	95	95	90	90
									100	100

**Description/Justification**  
 The Navstar Global Positioning System (GPS) provides user equipment for F-16 BLK 25/30/32 aircraft to compute platform position/velocity as well as aid computation of steering vectors to target locations. This avionics mod will install the embedded GPS/INS (EGI) that combines a ring laser gyro Inertial Navigation System (INS), a GEM II GPS receiver card, and a master kalman navigation filter in a single LRU. Existing Ring Laser Gyro INUs being removed as a result of this modification will replace LN-39 mechanical INUs installed in Block 40/42 aircraft. No funding for aircraft OFF development is included as integration will occur in conjunction with OFF update (SCU-4). Kit components are procured by several agencies; component pricing is based upon quantities ordered and unique contract provisions. The aircraft total (620) assumes 4 of 624 aircraft will attrit before being modified. Installation costs include a Block 25/30/32 radio software upgrade to allow the radio to reliably receive EGI provided GPS timing data. Group A installations are being accomplished with Falcon-up modification and Service Life Improvement Program maintenance, when possible, to reduce cost. Also, Group A installation is accomplished as part of the Block 25/30/32 Combat Upgrade Plan Integration Details (CUPID). FY00 OGC funds relate to integration asset upgrade and CUPID modification costs. FY01 OGC funds relate to positioning removed RLG INUs. CUPID integrates GPS (3150M), NVIS (602030), SADL, and CMS (603030) modifications under a cost avoidance, common configuration plan.

Aircraft Breakdown: Active 196, Reserve 71, ANG 353

**Development Status**  
 EGI integration contract awarded 2/94; EGI F-16 missionization EDR completed; EGI integration unit deliveries completed. Group A development contract awarded 1/96; Group A's PDR, CDR, and mock-up installation completed; T&E aircraft T-2 modifications completed. Integration testing began 5/97 with SCU-4 OFF testing; continuing.

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		15.9		2.4		0.9						
PROCUREMENT (3010)												
INSTALL KITS	432	15.7	65	1.7	89	2.3	34	1.1				
KITS NONRECUR		2.7		0.0		0.0		0.0				
EQUIPMENT	[432]	38.6	[65]	6.1	[89]	8.6	[34]	3.3				
EQUIP NONREC		1.3		0.0								
CHANGE ORDERS												
DATA						0.1						
SIM/TRAINER					[2]	0.2						
SUPPORT-EQUIP												
OGC						1.1		0.7				
INSTALLATION OF HARDWARE												
FY-97 150 KITS	[10]	0.2	[140]	5.3								
FY-98 282 KITS			[135]	5.1	[128]	4.7	[17]	0.8	[2]	0.1		
FY-99 65 KITS					[51]	1.9	[14]	0.6				
FY-00 89 KITS							[68]	3.0	[21]	1.3		
FY-01 34 KITS									[34]	2.2		
TOTAL INSTALL	10	0.2	275	10.3	179	6.5	99	4.4	57	3.6		
TOTAL COST (BP-1100)	432	58.5	65	18.2	89	18.9	34	9.6		3.6		

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-3150M NAVSTAR GPS F-16 CUPID  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								19.2
PROCUREMENT (3010)								
INSTALL KITS					620	20.8		
KITS NONRECUR						2.8		
EQUIPMENT					[620]	56.7		
EQUIP NONREC						1.3		
CHANGE ORDERS								
DATA						0.1		
SIM/TRAINER					[2]	0.2		
SUPPORT-EQUIP								
OGC						1.7		
INSTALLATION OF HARDWARE								
FY-97 150 KITS					[150]	5.5		
FY-98 282 KITS					[282]	10.6		
FY-99 65 KITS					[65]	2.5		
FY-00 89 KITS					[89]	4.4		
FY-01 34 KITS					[34]	2.2		
TOTAL INSTALL					620	25.1		
TOTAL COST (BP-1100)					620	108.8		

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 18 Months

Follow-On Lead Time: 16 Months

Milestones

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)			03/97	11/97	12/98	12/00		
Delivery Date (Month/CY)			09/98	04/99	04/00	04/02		

Installation Schedule

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input								
Output								

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16 Class P  
PE 0207133F Team POWER

02/15/2000  
FY 2001 PBR  
Modification Title and No: ALE-47 MN-3450  
Models of Aircraft Affected: F-16 Block 40/42/50/52

Center: ASC - Wright Patterson AFB, OH

**Description/Justification**

This modification retrofits 243 block 40, 187 block 42, and 44 Block 50, F-16 aircraft with ALE-47 automatic/semi-automatic flare/chaff dispensing system. The ALE-47 provides improved aircraft survivability by dispensing compatible flare/chaff responses triggered by the ALR-56M Radar Warning Receiver, through preplanned and preprogrammed dispenser loads. Beginning August 1999 the ALE-47 was re-baselined to align with the F-16 Block 50 Night Vision install schedule. FY00 (19 installs) completes Block 40/42 requirements.

Aircraft Breakdown: Active 366, Reserve 0, ANG 108

**Development Status**  
Complete.

**Projected Financial Plan**

	PRIOR	FY-99		FY-00		FY-01		FY-02		FY-03	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)											
PROCUREMENT (3010)											
INSTALL KITS	430	3.2	0.1								
KITS NONRECUR		1.1									
EQUIPMENT	[430]	19.5	1.3								
EQUIP NONREC		0.6									
CHANGE ORDERS		2.4									
DATA		1.4	0.1		0.4						
SIM/TRAINER											
SUPPORT-EQUIP	[72]	1.8			0.7						
RETROFIT		1.1									
INSTALLATION OF HARDWARE											
FY-92 93 KITS	[93]	0.6									
FY-93 89 KITS	[89]	0.7									
FY-94 84 KITS	[84]	0.5									
FY-95 80 KITS	[77]	1.6	0.1								
FY-96 84 KITS	[22]	0.0	[19]	0.4							
FY-99 44 KITS			[43]	1.0		[44]	1.8				
TOTAL INSTALL	365	3.4	46	1.1	19	0.4	44	1.8			
TOTAL COST (BP-1100)	430	34.4	44	2.5	1.5			1.8			

(Totals may not add due to rounding)

UNCLASSIFIED

Fact Sheet: F-16 MN-3450 ALE-47  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					474	3.3		
KITS NONRECUR						1.1		
EQUIPMENT					[474]	20.8		
EQUIP NONREC						0.6		
CHANGE ORDERS						2.4		
DATA						1.8		
SIM/TRAINER								
SUPPORT-EQUIP					[72]	2.5		
RETROFIT						1.1		
INSTALLATION OF HARDWARE								
FY-92 93 KITS					[93]	0.6		
FY-93 89 KITS					[89]	0.7		
FY-94 84 KITS					[84]	0.5		
FY-95 80 KITS					[80]	1.6		
FY-96 84 KITS					[84]	1.5		
FY-99 44 KITS					[44]	1.8		
TOTAL INSTALL					474	6.7		
TOTAL COST (BP-1100)					474	40.3		

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 24 Months

Follow-On Lead Time: 7 Months

Milestones

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	02/92	09/93	09/94	09/95	09/96			12/98		
Delivery Date (Month/CY)	02/94	04/94	06/95	09/97	09/98			12/99		

Installation Schedule

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Quarters	1 2 3	4 1 2	3 4 1	2 3 4	3 4 1	2 3 4	1 2 3	4 1 2	3 4 1	2 3 4
Input				7 17	20 21	21 21	21 21	21 21	21 21	21 21
Output				7	17 20	21 21	21 21	21 21	21 21	21 21
Quarters	1 2 3	4 1 2	3 4 1	2 3 4	3 4 1	2 3 4	1 2 3	4 1 2	3 4 1	2 3 4
Input	5 5 5	4 4 4	11 11 11	11 11 11						
Output	5 5 5	4 4 4	11 11 11	11 11 11						

02/15/2000  
FY 2001 PBR  
Modification Title and No: ADVANCED WEAPON INTEGRATION MN-4260  
Models of Aircraft Affected: F-16 C/D

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT  
Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16  
PE 0207133F  
Team POWER

**Description/Justification**  
This P-3A reflects the integration of MN-4260 and MN-426030 into a single program. This is not a new start, nor an acceleration of MN-426030. The modification described in MN-4260 and MN-426030 is identical. It is for the hardware integration and weapons pylon modification efforts required to employ smart weapons (JDAM, JSOW, and WCMD) on the F16 block 25/30/32/40/42 aircraft. The weapon pylons will be modified with the 1760 interface. Once modified, all pylons will have the same Federal Stock Number which will reflect the Block 50 configuration. A total of 2084 standard weapons pylons will be modified for 238 Block 40, 182 Block 42, 208 Block 25, 362 Block 30 and 52 Block 32 aircraft (two per aircraft). Due to delays experienced at the Ogden-ALC, funding for installation of kits obligated in FY 96 will not be expended until FY 98 and FY 99 and those obligated in FY97 and FY 98 will not be expended until FY 99. These delays were caused by receipt of defective parts and scheduling conflicts within the Ogden-ALC. The installation of kits takes place within the Pylon and not the Aircraft, i.e., the modification is to the Pylon not the aircraft. Based on this, the numbers and associated cost are identified under the heading of Pylons and not Install Kits.

Aircraft Breakdown: Active 617, Reserve 0, ANG 425

**Development Status**  
Complete.

**Projected Financial Plan**

RDT&E (3600)	7.0									
	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03				
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
PROCUREMENT (3010)										
INSTALL KITS										
KITS NONRECUR										
EQUIPMENT										
EQUIP NONREC										
CHANGE ORDERS										
DATA										
SIM/TRAINER										
SUPPORT-EQUIP										
PYLONS	[569]	8.5	[50]	1.8	[185]	3.1	[185]	3.2		
WEAPONS UMBILICALS	[240]	0.4	[400]	0.6	[228]	0.8	[228]	0.8		
MISC		0.2								
INTEGRATION		6.5								
SOFTWARE		6.0								
TOTAL COST (BP-1100)		21.7		2.5	2.0	4.0				4.0

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-4260 ADVANCED WEAPON INTEGRATION  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								7.0
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.2
SIM/TRAINER								
SUPPORT-EQUIP								
PYLONS	[182]	3.2	[178]	3.2	[514]	9.6	[2,084]	35.0
WEAPONS UMBILICALS	[228]	0.8	[228]	0.8	[228]	0.9	[2,084]	6.7
MISC								0.2
INTEGRATION								6.5
SOFTWARE								6.0
TOTAL COST (BP-1100)		4.0		4.0		10.5		54.6
(Totals may not add due to rounding)								

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 6 Months

Follow-On Lead Time: 12 Months

Milestones

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07	FY-08
Contract Date (Month/CY)		03/97	08/97	01/98	03/99	02/00	01/01	01/02	01/03	01/04	01/05	01/06	01/07	
Delivery Date (Month/CY)		09/97	08/98	01/99	03/00	02/01	01/02	01/03	01/04	01/05	01/06	01/07	01/08	



UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16  
PE 0207133F Team POWER

02/15/2000

FY 2001 PBR

Modification Title and No: DIGITAL TERRAIN SYSTEM (DTS) MN-4262

Models of Aircraft Affected: BLK 25/30/40/50

Center: ASC - Wright Patterson AFB, OH

**Description/Justification**

The DTS program is purchasing data transfer cartridges (DTCs) that will host the DTS software and replace the current DTCs. DTS includes precise navigation capabilities and a ground collision avoidance system designed to save pilots and A/C by reducing the controlled flight into terrain mishaps. The current contract is buying DTCs with 80 megabytes of memory and a computer processor that runs the DTS calculations. The DTC is the medium to transfer mission data from a mission planning system to the aircraft. The program requirement is to supply 2 DTCs per USAF F-16.

Aircraft Breakdown: Active 538, Reserve 72, ANG 285

**Development Status**

Development is being accomplished and funded gratis by Fairchild.

**Projected Financial Plan**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)						
PROCUREMENT (3010)						
INSTALL KITS						
KITS NONREC						
EQUIPMENT	834	10.9	262	3.5	694	10.0
EQUIP NONREC						
CHANGE ORDERS						
DATA						
SIM/TRAINER						
SUPPORT-EQUIP	[111]	0.6				
TOTAL COST (BP-1100)	834	11.5	262	3.6	694	10.0
(Totals may not add due to rounding)						

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-4262 DIGITAL TERRAIN SYSTEM (DTS)  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
TOTAL COST (BP-1100)				
(Totals may not add due to rounding)				

Method of Implementation: ORG/INTERMEDIATE  
Initial Lead Time: 7 Months  
Follow-On Lead Time: 7 Months

Milestones

	FY-98	FY-99	FY-00
Contract Date (Month/CY)	05/99	05/99	04/00
Delivery Date (Month/CY)	12/99	12/99	11/00

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16  
PE 0207133F Team POWER

02/15/2000

FY 2001 PBR

Modification Title and No: RF TOWED DECOY SYSTEMS ALE-50 MN-5013

Models of Aircraft Affected: Block 25/30/32/ 40/42/50/ 52

Center: ASC - Wright Patterson AFB, OH

**Description/Justification**

Current funding for this modification will procure the required 1018 systems and retrofit 40 of these 1018 systems with a static protection module. This will leave 578 of the 1018 systems that will still require retrofit. The system will be installed on 1018 combat coded F-16 Block 25/30/32/40/42/50/52 active, Reserve, and ANG aircraft as the Active Towed Decoy (ATD) system. System quantities by Block are 90, 316, 44, 248, 90, 196, and 34, respectively. The major components of the system are the decoy, canisters, magazines, and launcher/controller mounted in a 16S350-5 pylon assembly on wing stations 2 and/or 8 (the canisters and decoys are not purchased under this mod). The system is an RF repeater acting to decoy threat systems that engage the F-16 resulting in increased miss distance. Kits will not be procured. As the pylons (Lockheed Martin) and LRUs (Raytheon) come off the production line they will be shipped directly to the operating locations for installation by Organizational Maintenance. No aircraft hardware modification is needed and the required Block 40/42/50/52 aircraft core avionics software changes have been accomplished. The Government will accomplish the Block 25/30/32 core avionics software changes organically in CY00.

Aircraft Breakdown: Active 583, Reserve 60, ANG 375

**Development Status**  
Complete.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		1.8				1.4						
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
RETROFIT												
TOTAL COST (BP-1100)		57.0		37.8		18.2		6.0		5.1		17.8
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-5013 RF TOWED DECOY SYSTEMS ALE-50  
(Continued)

FY-04	FY-05	TO COMP	TOTAL
QTY	COST	QTY	COST

RDT&E (3600)

3.1

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

RETROFIT

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 14 Months

Follow-On Lead Time: 14 Months

**Milestones**

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)	12/96	12/97	03/99	03/00	03/01	03/02	03/03	03/04
Delivery Date (Month/CY)	02/98	02/99	05/00	05/01	05/02	05/03	05/04	05/05

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16  
PE 0207133F Team POWER

02/15/2000  
FY 2001 PBR  
Modification Title and No: MAIN AIRCRAFT BATTERY MN-52338B  
Models of Aircraft Affected: F-16 Blocks 25/30/32  
Center: ASC - Wright Patterson AFB, OH

**Description/Justification**

This modification was contained in the FY98 PB, but was subsequently removed in the FY99 PB. Modification replaces the existing F-16 Main Aircraft Battery with a commercially available maintenance free battery. There are major pay-backs from this modification. The Mean Time Between Failure will increase from 115 hours to 3,268 hours and the Mean Time Between Maintenance will increase from 24 hours to 419 hours.

Aircraft Breakdown: Active 210, Reserve 71, ANG 343

**Development Status**

None

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR	244	0.8	380	1.3								
EQUIPMENT												
EQUIP NONREC		0.3										
CHANGE ORDERS		0.2										
DATA												
SIM/TRAINER		0.0										
SUPPORT-EQUIP												
TOTAL COST (BP-1100)	244	1.4	380	1.3								
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-52338B MAIN AIRCRAFT BATTERY  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR			624	2.1
EQUIPMENT				
EQUIP NONREC				0.3
CHANGE ORDERS				0.2
DATA				
SIM/TRAINER				0.0
SUPPORT-EQUIP				
TOTAL COST (BP-1100)			624	2.6

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

Milestones

	FY-98	FY-99
Contract Date (Month/CY)	03/00	03/00
Delivery Date (Month/CY)	09/00	09/00

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16 Class P  
PE 0207133F Team POWER

02/15/2000

FY 2001 PBR

Modification Title and No: SCREECH / EXHAUST DUCT LINER BURNTHRU MN-6020

Models of Aircraft Affected: F-16 BLOCK 50

Center: ASC - Wright Patterson AFB, OH

**Description/Justification**

The Block 50 F110-GE-129 engines are experiencing high screech levels on fielded engines. This screech (high frequency vibration) is causing damage to the augmentor duct assembly, flame holder, fan core spray bars, and the exhaust duct liner. The damage includes broken or missing pieces and non-reparable cracks. Because of this problem, the F110-GE-129 engines must operate at approximately 95% of max thrust as an interim fix to reduce hardware failures. F110 engines have experienced 52 exhaust duct liner burn thrus, since January 1995 causing safety issues and increased maintenance. Exhaust duct liner burn thrus cause unscheduled engine removals (UERs) at a rate of .206/1000 engine flying hours (EFH), the leading cause of UERs. The safety risk is .818 nonrecoverable in flight shut downs per million engine flying hours (NRIFSD/MEFH). Navy experience after .5 million flight hours with this design change indicates that the modification will reduce both safety risk and UER rate to zero. This mod affects all engines including training engines, engines at the production facility, in test programs and in the field. Seven spare augmentor and exhaust nozzle assemblies in the supply system are also affected.

Aircraft Breakdown: Active 264, Reserve 0, ANG 0

**Development Status**

Complete. Development under the Engine Component Improvement Program (CIP).

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR			129	6.1	135	6.3						
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA						0.1						
SIM/TRAINER												
SUPPORT-EQUIP												
MOD OF SPARES			[4]	0.2	[3]	0.1						
TOTAL COST (BP-1100)			129	6.3	135	6.4						

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-6020 SCREECH / EXHAUST DUCT LINER BURNTHRU  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR							264	12.3
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.1
SIM/TRAINER								
SUPPORT-EQUIP								
MOD OF SPARES							[7]	0.3
TOTAL COST (BP-1100)							264	12.7

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 17 Months

Follow-On Lead Time: 17 Months

Milestones

	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	08/99	01/01	03/00	03/01
Delivery Date (Month/CY)			08/01	08/02



02/15/2000  
FY 2001 PBR  
Modification Title and No: BLOCK 30 NIGHT VISION IMAGING SYSTEM (NVIS)-CUPID MN-602030  
Models of Aircraft Affected: F-16 Blocks 25/30/32

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT  
Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16  
PE 0207133F Team POWER

**Description/Justification**  
This effort incorporates Night Vision Imaging System (NVIS) Compatible Lighting kits on all F-16 Block 25/30/32 C/D aircraft. This modification includes both internal (cockpit) and external lighting. This is a follow-on program to the Guard/Reserve 160 unit buy in FY96-97. This program is common with the Block 40/50 NVIS modification. Block 25/30/32 NVIS is part of the Combat Upgrade Plan Integration Details (CUPID). CUPID integrates NVIS, Global Positioning System (GPS), ALQ-213 Countermeasure Set (CMS), and Situational Awareness Data Link (SADL) under a cost avoiding configuration plan. To help retrofit the F-16 Block 25/30/32 fleet, 129 kits were procured with \$5.5M of FY98 Guard Reserve Equipment Account (GREA) funding. These 129 kits will be installed with funding on this modification. Install kit procurement totals include both C-model and D-model kits and the ratio of C to D model kits varies between fiscal years. In FY98, a C-model kit cost \$40,027 and a D-model kit cost \$60,474. Kit delivery is monthly, so kits will be ahead of installment.

Aircraft Breakdown: Active 194, Reserve 11, ANG 247

**Development Status**  
None- No RDT&E required.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	122	5.1	95	4.3	38	1.8	55	2.7	13	0.6		
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC		0.2		1.6		0.1						
CHANGE ORDERS		0.1		1.0								
DATA												
SIM/TRAINER				0.2		0.8		0.1				
SUPPORT-EQUIP				0.6		1.2	[16]	0.9				
MOD OF SPARES	[13]	0.7	[11]	2.4								
OGC												
INSTALLATION OF HARDWARE												
FY-98 122 KITS					[243]	5.4	[8]	0.2				
FY-99 95 KITS							[95]	2.3				
FY-00 38 KITS							[38]	0.9				
FY-01 55 KITS									[55]	1.3	[13]	0.2
FY-02 13 KITS											13	0.2
TOTAL INSTALL												
					243	5.4	141	3.4	55	1.3		
TOTAL COST (BP-1100)	122	6.1	95	10.1	38	9.3	55	7.2	13	1.9		0.2

(Totals may not add due to rounding)

UNCLASSIFIED

Fact Sheet: F-16 MN-602030 BLOCK 30 NIGHT VISION IMAGING SYSTEM (NVIS)-CUPID

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			323	14.6
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				1.8
CHANGE ORDERS				1.2
DATA				
SIM/TRAINER				1.1
SUPPORT-EQUIP				3.4
MOD OF SPARES			[64]	2.4
OGC				
INSTALLATION OF HARDWARE				
FY-98			[251]	5.6
122 KITS				
FY-99			[95]	2.3
95 KITS				
FY-00			[38]	0.9
38 KITS				
FY-01			[55]	1.3
55 KITS				
FY-02			[13]	0.2
13 KITS				
TOTAL INSTALL			452	10.4
TOTAL COST (BP-1100)			323	34.9

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

Milestones

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)	04/98	03/99	03/00	03/01	03/02	
Delivery Date (Month/CY)	04/99	03/00	03/01	03/02	03/03	

Installation Schedule

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
Quarters	1	2	3	4	1	2
Input						
Output						

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16  
PE 0207133F Team POWER

02/15/2000

FY 2001 PBR

Modification Title and No: BLOCK 42 CAS IMPROVED DATA MODEM (IDM) MN-602039

Models of Aircraft Affected: F-16 BLOCK 42 C/D

Center: ASC - Wright Patterson AFB, OH

**Description/Justification**

This mod improves the Air Force's ability to provide Close Air Support (CAS) for the Army. The Improved Data Modem (IDM) is a flight-proven, off-the-shelf system which provides an open architecture, multi-path approach to situational awareness in the cockpit. The IDM is a high speed digital data link modem capable of passing near real-time targeting data between joint services air and ground weapons platforms in support of Suppression of Enemy Air Defense (SEAD), Close Air Support (CAS), Forward Air Control (FAC), Special Operations, Air Combat, and Command and Control. This program provides for retrofit modifications of combat coded Block 42 aircraft with the Improved Data Modem (IDM).

Aircraft Breakdown: Active 17, Reserve 0, ANG 41

**Development Status**

The development activities will span only one year and will capitalize on previous development work conducted under the Block 40 Close Air Support program. EMD contract was awarded Mar 99.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)				2.1								
PROCUREMENT (3010)												
INSTALL KITS					52	1.2	6	0.2				
KITS NONRECUR						0.6						
EQUIPMENT					[52]	2.4	[6]	0.3				
EQUIP NONREC												
CHANGE ORDERS						0.0		0.2				
DATA												
SIM/TRAINER								0.1				0.5
SUPPORT-EQUIP												
INSTALLATION OF HARDWARE												
FY-00 52 KITS					[14]	0.9	[38]	3.1				
FY-01 6 KITS							[6]	0.7				
TOTAL INSTALL					14	0.9	44	3.7				
TOTAL COST (BP-1100)					52	5.2	6	4.9				

(Totals may not add due to rounding)

UNCLASSIFIED

Fact Sheet: F-16 MN-602039 BLOCK 42 CAS IMPROVED DATA MODEM (IDM)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								2.1
PROCUREMENT (3010)								
INSTALL KITS					58			1.4
KITS NONREC								0.6
EQUIPMENT					[58]			2.7
EQUIP NONREC								0.3
CHANGE ORDERS								
DATA								
SIM/TRAINER								0.6
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-00 52 KITS							[52]	4.0
FY-01 6 KITS							[6]	0.7
TOTAL INSTALL							58	4.7
TOTAL COST (BP-1100)							58	10.1

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 12 Months

Follow-On Lead Time: 8 Months

Milestones

	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	12/99			
Delivery Date (Month/CY)	12/00			

Installation Schedule

	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input		14	12	12
Output			14	12

PE 0207133F Team POWER

UNCLASSIFIED

Fact Sheet: F-16 MN-602040 BLK 40/50 NIGHT VISION IMAGING SYSTEM (NVIS)

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	QTY
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			668	29.6
KITS NONRECUR				1.6
EQUIPMENT				
EQUIP NONREC				1.8
CHANGE ORDERS				1.6
DATA				
SIM/TRAINER				1.4
SUPPORT-EQUIP				3.9
MOD OF SPARES			[73]	
OGC				
INSTALLATION OF HARDWARE				
FY-98 116 KITS			[116]	4.7
FY-99 203 KITS			[203]	7.9
FY-00 184 KITS			[184]	7.0
FY-01 165 KITS			[165]	8.9
TOTAL INSTALL			668	28.6
TOTAL COST (BP-1100)			668	68.6

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 15 Months

Follow-On Lead Time: 12 Months

Milestones

	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	04/98	03/99	03/00	03/01	
Delivery Date (Month/CY)	07/99	03/00	03/01	03/02	

Installation Schedule

	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input			12 54 54 77	77 76 76 75	75 15 15
Output			12 54 54 77	77 76 76 75	75 15 15

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16  
PE 0207133F Team POWER

02/15/2000

FY 2001 PBR

Modification Title and No: BLOCK 40 CAS IMPROVED DATA MODEM (IDM) MN-602041

Models of Aircraft Affected: F-16 BLOCK 40 C/D

Center: ASC - Wright Patterson AFB, OH

**Description/Justification**

This mod improves the Air Force's ability to provide Close Air Support (CAS) for the Army. The Improved Data Modem (IDM) is a flight-proven, off-the-shelf system which provides an open architecture, multi-path approach to situational awareness in the cockpit. The IDM is a high speed digital data link modem capable of passing near real-time targeting data between joint services air and ground weapons platforms in support of Suppression of Enemy Air Defense (SEAD), Close Air Support (CAS), Forward Air Control (FAC), Special Operations, Air Combat, and Command and Control. This program provides for retrofit modifications of combat coded Block 40 aircraft with the Improved Data Modem (IDM). This program will upgrade 190 IDMs already in the USAF inventory, and 47 new units will be procured. Installation of this mod was delayed and will occur in FY00 in order to align IDM with delivery and installation of MN-602040 Night Vision Imaging System (NVIS). Combining IDM with NVIS installation eliminates redundant depot induction costs and reduces aircraft downtime.

Aircraft Breakdown: Active 218, Reserve 0, ANG 19

**Development Status**

Completed

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		3.1										
PROCUREMENT (3010)	118	2.4	119	2.6								
INSTALL KITS												
KITS NONRECUR					[47]							
EQUIPMENT						2.4						
EQUIP NONREC		0.8										
CHANGE ORDERS												
DATA												
SIM/TRAINER	[10]	0.0										
SUPPORT-EQUIP		1.8		0.3								
INSTALLATION OF HARDWARE												
FY-98 118 KITS			[17]	1.1	[101]	9.8						
FY-99 119 KITS					[43]	4.2	[76]	5.3				
TOTAL INSTALL			17	1.1	144	14.0	76	5.3				
TOTAL COST (BP-1100)	118	5.1	119	4.0		16.4		5.3				

(Totals may not add due to rounding)

UNCLASSIFIED

Fact Sheet: F-16 MN-602041 BLOCK 40 CAS IMPROVED DATA MODEM (IDM)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								3.1
PROCUREMENT (3010)								
INSTALL KITS					237			5.0
KITS NONRECUR								
EQUIPMENT					[47]			2.4
EQUIP NONREC								
CHANGE ORDERS								0.8
DATA								
SIM/TRAINER					[10]			0.0
SUPPORT-EQUIP								2.2
INSTALLATION OF HARDWARE								
FY-98 118 KITS					[118]			11.0
FY-99 119 KITS					[119]			9.5
TOTAL INSTALL					237			20.5
TOTAL COST (BP-1100)					237			30.8

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 12 Months

Follow-On Lead Time: 9 Months

Milestones

Contract Date (Month/CY)	FY-98	FY-99	FY-00	FY-01	FY-02
Delivery Date (Month/CY)	06/98	12/98	09/99		

Installation Schedule

	<u>FY-98</u>					<u>FY-99</u>					<u>FY-00</u>					<u>FY-01</u>					<u>FY-02</u>			
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Input									17	36	36	36	36	36	40	28	8							
Output										17	36	36	36	36	36	40	28	8						



02/15/2000  
FY 2001 PBR  
Modification Title and No: BLK 50 MODULAR MISSION COMPUTER MMC-CCIP MN-602150  
Models of Aircraft Affected: BLOCK 50/52

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT  
Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16  
Class P  
PE 0207133F  
Team POWER

**Description/Justification**  
This modification replaces the General Avionics Computer (GAC) with a Modular Mission Computer (MMC). The MMC will increase core computer capability to allow incorporation of advanced capabilities such as Link 16 and smart weapons. Lead Mod for Block 50/52 CCIP aircraft. Aircraft Breakdown number is lower than current Combat Air Force numbers due to anticipated attrition. This mod is baselined with MN 602140, Block 40 Modified Modular Mission Computer; MN 610240, Block 40 Color Display; MN 661640, Block 40 Link 16; MN 602150, Block 50 Modified Modular Mission Computer; MN 610250, Block 50 Color Display; MN 661650, Block 50 Link 16; MN650050, Block 50 JHMCS; MN 650040, and Block 40 JHMCS.

Aircraft Breakdown: Active 214, Reserve 0, ANG 18

**Development Status**  
The development program for this effort has completed CDR.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		25.8										
PROCUREMENT (3010)			18	2.1	58	6.9	73	8.8	54	6.7	29	3.7
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT			[18]	22.3	[58]	32.7	[73]	38.3	[54]	24.7	[29]	14.6
EQUIP NONREC												
CHANGE ORDERS										0.7		0.4
DATA				0.5								
SIM/TRAINER								0.7		3.2		0.7
SUPPORT-EQUIP												
INSTALLATION OF HARDWARE												
FY-99			18				[18]	2.7	[58]	8.8	[73]	11.4
FY-00												
FY-01												
FY-02												
FY-03												
TOTAL INSTALL							18	2.7	58	8.8	73	11.4
TOTAL COST (BP-1100)			18	24.9	58	39.6	73	50.5	54	44.1	29	30.7

(Totals may not add due to rounding)



02/15/2000  
 FY 2001 PBR  
 Modification Title and No: PRE BLK 40 STRUCTURAL IMPROVEMENT PROGRAM MN-6022  
 Models of Aircraft Affected: F-16 C/D BLOCK 25/30/32  
 Center: ASC - Wright Patterson AFB, OH  
 UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT  
 Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 CLC: F-16  
 PE 0207133F  
 Team POWER

**Description/Justification**  
 Engineering test, analysis, and operational experience indicate the Block 25/30/32 aircraft structure will not attain the required 8,000 hour service life. These aircraft require Falcon UP, the modification funded by this program, and the Service Life Improvement Program 'Plus' (SLIP+), a repair funded separately with O&M dollars. Falcon UP combines the following structural modifications: TCTO 1832, which replaces the lower Fuselage Station (FS) 341 bulkhead, adds a strap to the lower FS 357 bulkhead, reworks fuel shelf joints and bolt holes on the wing carry through bulkheads, replaces selected upper bulkhead segments, and reworks the General Electric engine mount longerons; TCTO 1946, which reworks the lower strake flanges of the wing carry through bulkheads; and TCTO 1947, which reworks the upper FS 341 bulkhead inclined stiffeners. SLIP+ combines the following structural repairs: TCTO 2034, which replaces the upper FS 479 bulkhead; TCTO 2059, which replaces the Pratt & Whitney forward engine mount fitting; TCTO 2060, which replaces the upper center fuselage access panels and aft BL19 longerons; and TCTO 2131, which adds a doubler to the upper FS 357 bulkhead. Without these improvements Block 25/30/32 aircraft will experience continued structural degradation, which will be increasingly costly to correct, reduce aircraft availability, and possibly impact flight safety.

Aircraft Breakdown: Active 216, Reserve 73, ANG 349

**Development Status**  
 N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	630	23.5	8	1.3								
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC		2.5										
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
TOOLING		2.8										
SPARES		3.3										
INSTALLATION OF HARDWARE												
FY-92 33 KITS	[33]	9.9										
FY-93 64 KITS	[64]	19.1										
FY-94 92 KITS	[92]	30.3										
FY-95 92 KITS	[92]	27.2										
FY-96 116 KITS	[116]	36.3										
FY-97 117 KITS	[24]	8.1	[93]	14.6			[2]	0.5				
FY-98 116 KITS			[24]	3.8	[90]	11.8	[8]	1.4				
FY-99 8 KITS												
TOTAL INSTALL	421	130.9	117	18.4	90	11.8	10	1.9				
TOTAL COST (BP-1100)	630	163.0	8	21.2								
(Totals may not add due to rounding)												

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Fact Sheet: F-16 MN-6022 PRE BLK 40 STRUCTURAL IMPROVEMENT PROGRAM

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			638	24.7
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				2.5
CHANGE ORDERS				
DATA				
SIM/TRAINER				4.4
SUPPORT-EQUIP				3.3
TOOLING				
SPARES				
INSTALLATION OF HARDWARE				
FY-92			[33]	9.9
FY-93			[64]	19.1
FY-94			[92]	30.3
FY-95			[92]	27.2
FY-96			[116]	36.3
FY-97			[117]	22.7
FY-98			[116]	16.1
FY-99			[8]	1.4
TOTAL INSTALL			638	163.0
TOTAL COST (BP-1100)			638	197.9

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 15 Months

Follow-On Lead Time: 18 Months

Milestones

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	06/92	09/93	03/94	03/95	03/96	03/97	03/98	03/99	03/99		
Delivery Date (Month/CY)	09/93	09/94	09/95	09/96	09/97	09/98	09/99	09/00			

Installation Schedule

		<u>FY-92</u>		<u>FY-93</u>	<u>FY-94</u>		<u>FY-95</u>			<u>FY-96</u>			<u>FY-97</u>			<u>FY-98</u>			<u>FY-99</u>		
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Input					5	7	9	10	15	18	18	22	22	22	23	24	29	29	29	29	
Output							5	7	9	10	15	18	18	22	22	23	29	29	29	29	
Quarters	1	2	3	4	1	2	3	4													
Input	23	23	23	21	3	2	3	2													
Output	29	29	23	23	21	3	2	3	2												

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

02/15/2000  
FY 2001 PBR  
Modification Title and No: BLOCK 40 STRUCTURAL IMPROVEMENT MN-602240  
Models of Aircraft Affected: BLOCK 40/42  
Center: ASC - Wright Patterson AFB, OH  
Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16  
Class P  
PE 0207133F  
Team POWER

Description/Justification

Engineering test, analysis, and operational experience indicate the Block 40/42 aircraft structure will not attain the needed 8,000 hour service life. These aircraft require the Falcon UP modification, which combines the following structural improvements: TCTO 1793 (replaces Pratt & Whitney forward engine mount fitting), TCTO 1811 (replaces BL19 longerons), TCTO 1827 (installs straps and plates on upper center fuselage skins), TCTO 1831 (reworks General Electric engine mount longerons), TCTO 1833 (reworks fuel shelf joint bolt holes), TCTO 1910 (reworks Fuselage Station (FS) 479 and FS 462 bulkhead vertical tail attach pads), and TCTO 1947 (reworks FS 341 bulkhead inclined stiffeners). Under Correction of Deficiency (COD) provisions, the contractor developed and supplies the modification kits at no cost to the government. The Air Force pays only for installation costs. Without this modification, Block 40/42 aircraft will experience continued structural degradation, which will be increasingly costly to correct, reduce aircraft availability, and possibly impact flight safety.

Aircraft Breakdown: Active 305, Reserve 0, ANG 80

Development Status

N/A

Projected Financial Plan

<u>Projected Financial Plan</u>												
	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
<hr/>												
RDT&E (3600)												
<hr/>												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
COD KITS			[318]		[48]		[19]					
<hr/>												
INSTALLATION OF HARDWARE												
FY-95 0 KITS			[84]	11.9								
FY-96 0 KITS			[84]	18.5								
FY-97 0 KITS			[84]	17.9								
FY-98 0 KITS			[66]	17.8								
FY-99 0 KITS					[48]	5.9	[19]	4.0				
TOTAL INSTALL			318	66.1	48	5.9	19	4.0				
<hr/>												
TOTAL COST (BP-1100)				66.1		5.9		4.0				
(Totals may not add due to rounding)												

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Fact Sheet: F-16 MN-602240 BLOCK 40 STRUCTURAL IMPROVEMENT  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDTE&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
COD KITS								
INSTALLATION OF HARDWARE								
FY-95 0 KITS								11.9
FY-96 0 KITS								18.5
FY-97 0 KITS								17.9
FY-98 0 KITS								17.8
FY-99 0 KITS								9.9
TOTAL INSTALL							385	76.0
TOTAL COST (BP-1100)								76.0

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 1 Month

Follow-On Lead Time: 1 Month

Milestones

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	12/94	12/95	12/96	12/97	12/98		
Delivery Date (Month/CY)	01/95	01/96	01/97	01/98	01/99		

Installation Schedule

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Quarters 1	2	3	4	1	2	3	4
Input	42	21	21	21	21	21	17
Output	21	21	21	21	21	21	15

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PE 0207133F Team POWER

(Totals may not add due to rounding)

UNCLASSIFIED

Fact Sheet: F-16 MN-602241 F-16A STRUCTURE IMPROVEMENT PGM  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)			24	3.3
INSTALL KITS				
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
INSTALLATION OF HARDWARE				
FY-00	6	KITS	[6]	2.2
FY-01	6	KITS	[6]	2.4
FY-02	6	KITS	[6]	2.4
FY-03	6	KITS	[6]	2.4
TOTAL INSTALL	6		24	7.0
TOTAL COST (BP-1100)			24	10.2

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

Milestones

	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
Contract Date (Month/CY)	03/00	03/01	03/02	03/03	03/04	03/05
Delivery Date (Month/CY)	03/01	03/02	03/03	03/04	03/05	03/06

Installation Schedule

	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
Quarters	1	2	3	4	1	2
Input	2	2	2	2	2	2
Output	2	2	2	2	2	2



02/15/2000

FY 2001 PBR

Modification Title and No: BLOCK 50/52 STRUCTURAL IMPROVEMENT MN-602250

Models of Aircraft Affected: BLOCK 50/52

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16

PE 0207133F Team POWER

**Description/Justification**

Engineering test, analysis, and operational experience indicate the structure of certain Block 50/52 aircraft will not attain the needed 8,000 hour service life. These aircraft require the Falcon UP modification. Falcon UP implements TCTO 1947, which reworks the upper Fuselage Station 341 bulkhead inclined stiffeners. Under Correction of Deficiency (COD) provisions, the contractor developed and supplies the modification kits at no cost to the government. The Air Force pays only for installation costs. This modification applies to the first 156 Block 50/52 aircraft delivered. It has been incorporated during production for all subsequent deliveries. Without this modification, Block 50/52 aircraft will experience continued structural degradation, which will be increasingly costly to correct, reduce aircraft availability, and possibly impact flight safety. This program was separated from the Block 40/42 Structural Improvement Program in the FY97 budget.

Aircraft Breakdown: Active 156, Reserve 0, ANG 0

**Development Status**

N/A

**Projected Financial Plan**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)						
PROCUREMENT (3010)						
INSTALL KITS						
KITS NONRECUR			25		56	75
EQUIPMENT						
EQUIP NONREC						
CHANGE ORDERS						
DATA						
SIM/TRAINER						
SUPPORT-EQUIP						
INSTALLATION OF HARDWARE						
FY-01 25 KITS			[25]	1.0	[56]	2.8
FY-02 56 KITS						[75]
FY-03 75 KITS						4.0
TOTAL INSTALL			25	1.0	56	75
						4.0
TOTAL COST (BP-1100)			25	1.0	56	75
						4.0

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-602250 BLOCK 50/52 STRUCTURAL IMPROVEMENT  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	QTY
RDTE&E (3600)				
PROCUREMENT (3010)				156
INSTALL KITS				
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
INSTALLATION OF HARDWARE				
FY-01 25 KITS				[25] 1.0
FY-02 56 KITS				[56] 2.8
FY-03 75 KITS				[75] 4.0
TOTAL INSTALL				156 7.9
TOTAL COST (BP-1100)				156 7.9

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 3 Months

Follow-On Lead Time: 3 Months

**Milestones**

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)				03/01	12/01	12/02	
Delivery Date (Month/CY)				06/01	03/02	03/03	

**Installation Schedule**

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input							
Output							

02/15/2000

FY 2001 PBR

Modification Title and No: ALQ-213 COUNTERMEASURE SET (CMS) - CUPID MN-603030

Models of Aircraft Affected: F-16 Block 25/30/32

Center: ASC - Wright Patterson AFB, OH

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: F-16

PE 0207133F Team POWER

**Description/Justification**

This modification install the ALQ-213 Countermeasures System (CMS) in 209 Block 25, 363 Block 30 and 40 Block 32 F-16 aircraft. It provides operation of an EC system with a single Cockpit Control Unit, hands-on chaff/flare dispenser, expanding the CMDS capability to select more expendable programs. CMS is a part of the Block 25/30/32 Combat Upgrade Plan Integrated Details (CUPID). The CMS Mod Program began with Guard and Reserve Equipment Account (GREA) funds. 430 Grp A kits and 418 Grp B kits, spares/WRSK and other miscellaneous requirements were purchased using GREA funds. 182 Group A Kits and 195 Group B kits (includes 1 GFE kit) are scheduled for purchase with 3010 funds. All installations will use USAF 3010 funds.

Aircraft Breakdown: Active 194, Reserve 71, ANG 347

**Development Status**

None. No RDT&E required.

**Projected Financial Plan**

RDT&E (3600)

**PROCUREMENT (3010)**

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

**INSTALLATION OF HARDWARE**

FY-97 0 KITS

FY-98 0 KITS

FY-99 60 KITS

FY-00 83 KITS

FY-01 39 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
		60	0.5	83	0.9	39	0.5				
		[65]	2.1	[88]	4.3	[42]	1.9				
					0.3		0.2				0.1
					0.2		0.7				
		[140]	3.6								
		[122]	3.4	[160]	5.4	[36]	1.1				
				[24]	0.7	[56]	1.7	[25]	0.8		
								[49]	1.5		
		262	7.0	184	6.1	92	2.8	74	2.2		
		60	9.6	83	11.8	39	6.0				
											2.3

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-603030 ALQ-213 COUNTERMEASURE SET (CMS) - CUPID

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					182	1.9		
KITS NONRECUR								
EQUIPMENT					[195]	8.3		
EQUIP NONREC								
CHANGE ORDERS						0.5		
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								0.9
INSTALLATION OF HARDWARE								
FY-97 0 KITS							[140]	3.6
FY-98 0 KITS							[282]	8.9
FY-99 60 KITS							[60]	1.8
FY-00 83 KITS							[81]	2.4
FY-01 39 KITS							[49]	1.5
TOTAL INSTALL							612	18.1
TOTAL COST (BP-1100)							182	29.7

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 12 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)			04/99	01/00	01/01	
Delivery Date (Month/CY)			10/99	07/00	07/01	

**Installation Schedule**

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input			65 65 66 66	46 46 46 46	18 18 28 28	17 17 20 20
Output			65 65 66 66	46 46 46 46	18 18 28 28	17 17 20 20

02/15/2000

FY 2001 PBR

Modification Title and No: BLOCK 50 COLOR DISPLAYS - CCIP MN-610250

Models of Aircraft Affected: BLOCK 50/52

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16

Center: ASC - Wright Patterson AFB, OH

PE 0207133F Team POWER

**Description/Justification**

Replaces the existing four inch monochrome displays with color displays developed by the F-16 Mid-Life Update Program. The color displays will provide increased pilot situational awareness through improved display symbology (targets, threats, etc) recognition. It will decrease pilot workload. This mod is baselined with MN 602140, Block 40 Modified Modular Mission Computer; MN 610240, Block 40 Color Display; MN 661640, Block 40 Link 16; MN 602150, Block 50 Modified Modular Mission Computer; MN 610250, Block 50 Color Display; MN 661650, Block 50 Link 16; MN650050, Block 50 JHMCS; MN 650040, and Block 40 JHMCS.

Aircraft Breakdown: Active 214, Reserve 0, ANG 18

**Development Status**

Design effort underway for commercialization of LRU components. This effort is being executed as a part of CCIP EMD, funded under MN 602140, Block 40 Modified Modular Mission Computer; MN 610240, Block 40 Color Display; MN 661640, Block 40 Link 16; MN 602150, MN 661650, Block 50 Link 16; MN 650050, Block 50 JHMCS; and MN 650040, Block 40 JHMCS.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		0.7										
PROCUREMENT (3010)												
INSTALL KITS			18	1.3	58	4.4	73	5.6	54	4.3	29	2.3
KITS NONREC												
EQUIPMENT			[18]	14.4	[58]	21.0	[73]	24.5	[54]	15.8	[29]	9.3
EQUIP NONREC				0.5				0.5		0.4		0.2
CHANGE ORDERS												
DATA												
SIM/TRAINER								0.4		2.0		1.7
SUPPORT-EQUIP												
INSTALLATION OF HARDWARE							[18]	1.7	[58]	5.7	[73]	7.3
FY-99 18 KITS												
FY-00 58 KITS												
FY-01 73 KITS												
FY-02 54 KITS												
FY-03 29 KITS												
TOTAL INSTALL							18	1.7	58	5.7	73	7.3
TOTAL COST (BP-1100)	18	16.2	58	25.4	73	32.8	54	28.2	29	20.9		

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-610250 BLOCK 50 COLOR DISPLAYS - CCIP

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								0.7
PROCUREMENT (3010)								
INSTALL KITS					232	18.0		
KITS NONRECUR								
EQUIPMENT					[232]	85.0		
EQUIP NONREC								
CHANGE ORDERS						1.7		
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								4.2
INSTALLATION OF HARDWARE								
FY-99 18 KITS					[18]	1.7		
FY-00 58 KITS					[58]	5.7		
FY-01 73 KITS					[73]	7.3		
FY-02 54 KITS	[54]	5.5			[54]	5.5		
FY-03 29 KITS			[29]	3.0	[29]	3.0		
TOTAL INSTALL	54	5.5	29	3.0	232	23.1		
TOTAL COST (BP-1100)		5.5		3.0	232	132.0		
(Totals may not add due to rounding)								

Method of Implementation: DEPOT

Initial Lead Time: 24 Months

Follow-On Lead Time: 24 Months

Milestones

Contract Date (Month/CY)  
Delivery Date (Month/CY)

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
		08/99	11/99	11/00	11/01	11/02		
		08/01	11/01	11/02	11/03	11/04		

Installation Schedule

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input								
Output								

02/15/2000

FY 2001 PBR

Modification Title and No: BLOCK 30 ENHANCED FIRE CONTROL COMPUTER UPGRADE MN-610330

Models of Aircraft Affected: BLOCK 25/30/32

Center: ASC - Wright Patterson AFB, OH

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16 Class P

PE 0207133F Team POWER

**Description/Justification**

The Expanded Enhanced Fire Control Computer increases throughput and removes obsolete parts. Without this upgrade and increased memory capability, will not be able to field with Software Capability Upgrade (SCU5) in 2004 and have Smart Weapons capability for F-16 Block 25/30/32 at that time. Installation costs are included in modification contract costs, including modification of spares. No new install kits are actually purchased, this is an upgrade only. Total Aircraft Breakdown includes upgrade of 113 spares.

Aircraft Breakdown: Active 243, Reserve 84, ANG 398

**Development Status**

Complete.

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

**INSTALLATION OF HARDWARE**

FY-99 295 KITS

FY-00 227 KITS

FY-01 203 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
			295	7.9 0.1	227	4.7	203	4.4				
				0.6 0.4								
					[120]		[175] [125]		[102] [203]		305	
					120		300					
			295	9.0	227	4.7	203	4.4				

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-610330 BLOCK 30 ENHANCED FIRE CONTROL COMPUTER UPGRADE

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					725	17.0		
KITS NONRECUR						0.1		
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS						0.6		
DATA						0.4		
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-99 295 KITS							[295]	
FY-00 227 KITS							[227]	
FY-01 203 KITS							[203]	
TOTAL INSTALL							725	
TOTAL COST (BP-1100)							725	18.1

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 10 Months

Follow-On Lead Time: 10 Months

Milestones

Contract Date (Month/CY)	FY-99	FY-00	FY-01	FY-02	FY-03
Delivery Date (Month/CY)	09/99	01/00	01/01		
	07/00	11/00	11/01		

Installation Schedule

	FY-99			FY-00			FY-01			FY-02			FY-03		
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
Input					45	75	75	75	75	75	75	75	80		
Output					45	75	75	75	75	75	75	75	75	5	



02/15/2000

FY 2001 PBR

Modification Title and No: BLOCK 50 AIR-TO-AIR INTERROGATOR MN-612150

Models of Aircraft Affected: BLOCK 50/52

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: F-16

PE 0207133F Team POWER

**Description/Justification**

FY00 New Start Congressional Notification is in process (as of Nov 99). No procurement funds will be obligated until Congressional Approval. Integration of an Air-to-Air Interrogator (AAD) on the USAF Block 50/52 F-16 Fighter. AAI will improve pilot situational awareness and support beyond visual range weapons delivery. Implementation of this program provides the F-16 pilot with friendly/unknown designations and decreases the chance of fratricide. Block 50 Modified Modular Mission Computer; MN 610250 and Block 50 Color Display precede this modification in the engineering sequence. Changes to either of these mods will likely affect AAI. Aircraft Breakdown number of 251 includes USAF Production Aircraft from FY96 through FY99.

Aircraft Breakdown: Active 233, Reserve 0, ANG 18

**Development Status**

Block 50/52 Integration Effort begins in August 99. Engineering release is scheduled for December 99.

**Projected Financial Plan**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
RD&E (3600)		1.0				
				6.4		
PROCUREMENT (3010)						
INSTALL KITS			20	1.1	73	3.9
KITS NONRECUR				0.5	100	5.5
EQUIPMENT			[20]	8.1	[100]	42.1
EQUIP NONREC						
CHANGE ORDERS				0.2		1.2
DATA						
SIM/TRAINER						
SUPPORT-EQUIP						
INSTALLATION OF HARDWARE						
FY-00					[20]	0.4
FY-01						
FY-02						
FY-03						
TOTAL INSTALL					20	0.4
					100	49.2
					58	30.3
TOTAL COST (BP-1100)			20	9.9	73	34.9

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-612150 BLOCK 50 AIR-TO-AIR INTERROGATOR

(Continued)

FY-04		FY-05		TO COMP		TOTAL	
QTY	COST	QTY	COST	QTY	COST	QTY	COST

RDTE&E (3600)

PROCUREMENT (3010)

INSTALL KITS				251	13.6		
KITS NONRECUR					0.5		
EQUIPMENT				[251]	105.3		
EQUIP NONREC							
CHANGE ORDERS					3.0		
DATA							

SIM/TRAINER

SUPPORT-EQUIP

INSTALLATION OF HARDWARE

FY-00	20 KITS			[20]	0.4		
FY-01	73 KITS			[73]	1.4		
FY-02	100 KITS			[100]	2.0		
FY-03	58 KITS			[58]	1.2		
TOTAL INSTALL	100	2.0	58	1.2	251	4.9	
TOTAL COST (BP-1100)		2.0		1.2	251	127.4	

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 24 Months

Follow-On Lead Time: 24 Months

Milestones

Contract Date (Month/CY)	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
Delivery Date (Month/CY)	03/00	11/00	11/02	11/03	11/04		

Installation Schedule

Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Input																				
Output																				

(Totals may not add due to rounding)

UNCLASSIFIED

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				1.0
PROCUREMENT (3010)				
INSTALL KITS			18	0.6
KITS NONRECUR				
EQUIPMENT			[18]	0.6
EQUIP NONREC				0.1
CHANGE ORDERS				0.1
DATA				
SIM/TRAINER				1.3
SUPPORT-EQUIP				0.2
INSTALL			[2]	
INSTALLATION OF HARDWARE				
FY-00 18 KITS			[18]	
TOTAL INSTALL			18	
TOTAL COST (BP-1100)			18	3.0

(Totals may not add due to rounding)

Method of Implementation: DEPOT FIELD TEAM

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)				08/00		
Delivery Date (Month/CY)				08/01		

**Installation Schedule**

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3
Input					6	6
Output					6	6

02/15/2000

FY 2001 PBR

Modification Title and No: BLOCK 50 IMPROVED AIRBORNE VIDEO TAPE RECORDER (IA MN-6400

Models of Aircraft Affected: BLOCK 50/52

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16

PE 0207133F Team POWER

**Description/Justification**

Provides kits to install Color Airborne Video Tape Recording System (CAVTR) in 185 Block 50 and 54 Block 52 F-16 aircraft delivered prior to FY97. CAVTR provides two hour, three sensor (HUD, LMFD, RMFD) color video recording for training, mission planning, battle damage assessment, and mission debriefing. Delays in kit installation schedule caused by problems encountered during kit proofing and depot field team scheduling conflicts.

Aircraft Breakdown: Active 221, Reserve 0, ANG 18

**Development Status**

None. No RDT&E required.

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

INSTALLATION OF HARDWARE

FY-96 223 KITS

FY-97 16 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
239		6.2										
0.9												
0.1												
0.4												
0.1												
2		1.7	[147]		[74]	1.1						
					[16]	0.2						
2		1.7	147	0.7	90	1.3						
239		9.3		0.8		1.3						

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-6400 BLOCK 50 IMPROVED AIRBORNE VIDEO TAPE RECORDER (IA

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					239			6.2
KITS NONRECUR								0.9
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.1
SIM/TRAINER								0.6
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-96 223 KITS						[223]		3.4
FY-97 16 KITS						[16]		0.2
TOTAL INSTALL						239		3.6
TOTAL COST (BP-1100)						239		11.4

(Totals may not add due to rounding)

Method of Implementation: DEPOT FIELD TEAM

Initial Lead Time: 3 Months

Follow-On Lead Time: 3 Months

Milestones

	FY-96	FY-97	FY-98	FY-99	FY-00
Contract Date (Month/CY)	09/97	03/98			
Delivery Date (Month/CY)	12/97	06/98			

Installation Schedule

	FY-96	FY-97	FY-98	FY-99	FY-00
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input				2 20 33 38 56 39 12	
Output				2 20 33 38 56 39 12	

02/15/2000

FY 2001 PBR

Modification Title and No: BLOCK 50 JOINT HELMET MOUNTED CUEING SYS - CCIP MN-650050

Models of Aircraft Affected: BLOCK 50/52

Center: ASC - Wright Patterson AFB, OH

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: F-16

PE 0207133F Team POWER

**Description/Justification**

Adds the Joint Helmet Mounted Cueing System (JHMCS) on Block 50/52 F-16 C/D. The JHMCS incorporates a man-mounted, ejection compatible helmet mounted display system, with capability to cue and verify cueing of high off-axis sensors and weapons. The JHMCS includes a flight helmet with display optics, image source, helmet tracker transducer, and cable attached to it, graphics processor/video hardware and software to drive the display, helmet tracker hardware and software, interfaces to the aircraft computers, weapons and sensor hardware, with software to integrate the JHMCS functions with other onboard systems. Aircraft Breakdown number of 251 includes USAF Production Aircraft from FY96 through FY99. This mod is baselined with MN 602140, Block 40 Modified Modular Mission Computer; MN 610240, Block 40 Color Display; MN 661640, Block 40 Link 16; MN 602150, Block 50 Modified Modular Mission Computer; MN 610250, Block 50 Color Display; MN 661650, Block 50 Link 16; MN650050, Block 50 JHMCS; MN 650040, and Block 40 JHMCS.

Aircraft Breakdown: Active 233, Reserve 0, ANG 18

**Development Status**

EMD Program underway. Two engineering proof and two test aircraft will be modified during EMD.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		0.8		4.5		4.9						
PROCUREMENT (3010)												
INSTALL KITS					28	1.1			100	3.8	123	4.8
KITS NONRECUR					[28]	4.1			[100]	14.8	[123]	18.6
EQUIPMENT						2.0				0.5		
EQUIP NONREC						0.4				0.4		0.5
CHANGE ORDERS						0.2				0.9		1.1
DATA												
SIM/TRAINER									3.5	0.3		0.3
SUPPORT-EQUIP												
INSTALLATION OF HARDWARE											[28]	1.4
FY-01 28 KITS												
FY-02 100 KITS												
FY-03 123 KITS												
TOTAL INSTALL											28	1.4
TOTAL COST (BP-1100)					28	11.3			100	20.7	123	26.7

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-650050 BLOCK 50 JOINT HELMET MOUNTED CUEING SYS - CCIP

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDTE&E (3600)								10.1
PROCUREMENT (3010)								
INSTALL KITS					251			9.7
KITS NONRECUR								
EQUIPMENT					[251]			37.5
EQUIP NONREC								2.6
CHANGE ORDERS								1.3
DATA								2.2
SIM/TRAINER								4.0
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-01 28 KITS							[28]	1.4
FY-02 100 KITS		6.0					[100]	6.0
FY-03 123 KITS			[123]	8.3			[123]	8.3
TOTAL INSTALL	100	6.0	123	8.3			251	15.6
TOTAL COST (BP-1100)		6.0		8.3			251	72.9
(Totals may not add due to rounding)								

Method of Implementation: DEPOT

Initial Lead Time: 24 Months

Follow-On Lead Time: 24 Months

**Milestones**

Contract Date (Month/CY)  
Delivery Date (Month/CY)

FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06
				01/01	11/01	11/02			
				01/03	11/03	11/04			

**Installation Schedule**

	FY-97		FY-98		FY-99		FY-00		FY-01		FY-02		FY-03		FY-04	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Quarters																
Input																
Output																
	FY-05		FY-06		FY-07		FY-08		FY-09		FY-10		FY-11		FY-12	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Quarters																
Input																
Output																



02/15/2000

FY 2001 PBR

Modification Title and No: BLOCK 50 LINK 16 - CCIP MN-661650

Models of Aircraft Affected: BLOCK 50/52

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16

PE 0207133F Team POWER

**Description/Justification**

This modification adds a Link 16 capable data link. Link 16 provides a jam-resistant, secure digital data transfer network capability with a standardized waveform and data format allowing intrafight (within a formation) and interflight (external to a formation) communications, primarily among aircraft. Link 16 will increase mission effectiveness by providing positive position awareness of all aircraft on a network, correlating offboard and onboard sensor data and realtime sharing of target, threat, and intel updates. Aircraft Breakdown number of 251 includes USAF Production Aircraft from FY96 through FY99. This mod is baselined with MN 602140, Block 40 Modified Modular Mission Computer; MN 610240, Block 40 Color Display; MN 661640, Block 40 Link 16; MN 602150, Block 50 Modified Modular Mission Computer; MN 610250, Block 50 Color Display; MN 661650, Block 50 Link 16; MN650050, Block 50 JHMCS; MN 650040, and Block 40 JHMCS.

Aircraft Breakdown: Active 233, Reserve 0, ANG 18

**Development Status**

EMD program underway. Two engineering proof A/C and two test A/C will be modified during the EMD program.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		5.6		14.6		9.2						
PROCUREMENT (3010)												
INSTALL KITS					28	1.3			100	4.7	123	5.9
KITS NONRECUR												
EQUIPMENT					[28]	12.7			[100]	35.5	[123]	39.3
EQUIP NONREC						4.4				1.5		
CHANGE ORDERS						0.3				0.9		1.1
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
INSTALLATION OF HARDWARE												
FY-01 28 KITS											[28]	1.1
FY-02 100 KITS												
FY-03 123 KITS												
TOTAL INSTALL											28	1.1
TOTAL COST (BP-1100)					28	18.7			100	42.6	123	47.4

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-661650 BLOCK 50 LINK 16 - CCIP

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		29.4						29.4
PROCUREMENT (3010)								
INSTALL KITS					251	11.9		
KITS NONRECUR								
EQUIPMENT					[251]	87.4		
EQUIP NONREC						5.9		
CHANGE ORDERS						2.4		
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-01 28 KITS							[28]	1.1
FY-02 100 KITS	[100]	6.3					[100]	6.3
FY-03 123 KITS			[123]	10.5			[123]	10.5
TOTAL INSTALL	100	6.3	123	10.5			251	17.9
TOTAL COST (BP-1100)		6.3		10.5			251	125.5
(Totals may not add due to rounding)								

Method of Implementation: DEPOT

Initial Lead Time: 24 Months

Follow-On Lead Time: 24 Months

**Milestones**

Contract Date (Month/CY)  
Delivery Date (Month/CY)

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06
				01/01	11/01	11/02			
				01/03	11/03	11/04			

**Installation Schedule**

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06
Quarters	1	2	3	4	1	2	3	4	1
Input									
Output									
Quarters	1	2	3	4	1	2	3	4	1
Input									
Output									

02/15/2000  
FY 2001 PBR  
Modification Title and No: LOW COST SAFETY MODIFICATIONS MN-99999A  
Models of Aircraft Affected: F-16

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT  
Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16  
PE 0207133F Team POWER

**Description/Justification**  
These are low cost (under \$950k each) modifications necessary to improve safety.

FY99 low cost safety mods include: 3.0 Amp Float Switch (\$520,000)

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

**Development Status**  
As required.

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
<b>Projected Financial Plan</b>												
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
MISC		2.0		0.6		0.8		0.0		0.0		0.0
TOTAL COST (BP-1100)				0.6		0.8		0.0		0.0		0.0
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-99999A LOW COST SAFETY MODIFICATIONS  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KIT'S NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
MISC		0.2		0.0				3.6
TOTAL COST (BP-1100)		0.2		0.0				3.6
(Totals may not add due to rounding)								

Method of Implementation:

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-93

Contract Date (Month/CY)

Delivery Date (Month/CY)

02/15/2000

FY 2001 PBR

Modification Title and No: MISC ENGINE UPDATE MODS MN-99999E

Models of Aircraft Affected: F-16

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16 Class P

Center: ASC - Wright Patterson AFB, OH

PE 0207133F Team POWER

Description/Justification

These are low cost (under \$950K) engine modifications in support of misc engine ECP/CCP's.

Current FY97 Modifications include: F110-GE-129 HPT (\$137,411), F110-GE-129 Turbine Frame Outer Liner (\$76,000), Falcon 229 Engine Upgrade (\$80,947).

Current FY98 Modifications include: F100-PW-229 ECP (\$5,750), Engine Depot SE (\$202,364)

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

Development Status

N/A.

Projected Financial Plan

RD&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

MISC

PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
QTY	COST	QTY	COST	QTY	COST
QTY	COST	QTY	COST	QTY	COST

3.2	0.2	0.8	0.0	0.0	0.0
-----	-----	-----	-----	-----	-----

TOTAL COST (BP-1100)

3.2

0.8

0.0

0.0

0.0

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-99999E MISC ENGINE UPDATE MODS  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
MISC		0.2		0.0				4.5
TOTAL COST (BP-1100)		0.2		0.0				4.5
(Totals may not add due to rounding)								

Method of Implementation: ORG/INTERMEDIATE  
Initial Lead Time: 0 Months Follow-On Lead Time: 0 Months

**Milestones**

FY-93

Contract Date (Month/CY)

Delivery Date (Month/CY)

PE 0207133F Team POWER

## UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-99999U LOW COST RETROFIT MODS  
(Continued)

FY-04		FY-05		TO COMP		TOTAL	
QTY	COST	QTY	COST	QTY	COST	QTY	COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

MISC

5.3

TOTAL COST (BP-1100)

5.3

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

Milestones

FY-93

Contract Date (Month/CY)

Delivery Date (Month/CY)



02/15/2000  
 FY 2001 PBR  
 Modification Title and No: LOW COST MODIFICATIONS MN-99999X  
 Models of Aircraft Affected: F-16  
 Center: ASC - Wright Patterson AFB, OH  
 UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT  
 Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: F-16  
 PE 0207133F Team POWER

Description/Justification  
 These are low cost (under \$950K each) modifications (including simulators) necessary to improve reliability, maintainability, safety, and mission performance.

Current FY97 Projects include: Mod Throttle Enhancement Signal Data Converter (\$336,000), DFELCS OFP Load Mod (\$103,000), Ground Playback Equipment for Kunsan (\$50,080), ALR-56M GFE Repair (\$34,000), UCADC (\$7,763), Replace CMBD Alt Radar Alt (\$4,500), Pressure Breathing Mod (\$6,500), and Pilots Glare Shield (\$3,000).

Current FY98 Projects include: Bills from a cancelled funds mod (\$60,851), Aircrew Eye (\$9,500), Unit Training Device (\$50,000) and MFCSOV Switch Side Guard (\$7,000).

Current FY99 Projects include: ALR-56M GFE Repair (\$166,000), RT-1505 Upgrade (\$243,000), Thunderbird No 12 Falcon Up (\$300,000)

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

Development Status  
 N/A

Projected Financial Plan

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RD&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
MISC		5.9				1.5						
TOTAL COST (BP-1100)		5.9				1.5						
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-99999X LOW COST MODIFICATIONS  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
MISC				7.4
TOTAL COST (BP-1100)				7.4

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

Milestones

FY-93

Contract Date (Month/CY)

Delivery Date (Month/CY)

02/15/2000

FY 2001 PBR

Modification Title and No: FM IMMUNITY MN-DC101

Models of Aircraft Affected: F-16C/D blk 20/3040/50

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: F-16

PE 0207133F Team POWER

Description/Justification

FY00 funds were provided in a Congressional Plus-up for the FY00PB Global Air Traffic Management(GATM). The precision approach and landing requirements for Global Air Traffic Management (GATM) requires increased selectivity and filtering to existing Instrument Landing Systems (ILSs). This increased selectivity and filtering is referred to as 'ILS Frequency Modulation (FM) Immunity'. The International Civil Aviation Organization (ICAO) has established 1 Jan 01 to have FM Immunity capability on aircraft operating in Europe. ACC has dictated that the Multi-Mode Receiver (MMR) be used to fill this need. This modification was Congressional directed and is not a new start.

Aircraft Breakdown: Active 80, Reserve 0, ANG 0

Development Status

Development and production of MMR being managed by ESC. F-16 integration to be accomplished when production MMRs are available.

Projected Financial Plan

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC					36	1.6	44	2.0				
CHANGE ORDERS						0.1						
DATA						0.5						
SIM/TRAINER												
SUPPORT-EQUIP												
INTEGRATION						1.0						
TOTAL COST (BP-1100)					36	3.1	44	2.0				

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-DC101 FM IMMUNITY  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR					80			3.6
EQUIPMENT								0.1
EQUIP NONREC								
CHANGE ORDERS								0.5
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								1.0
INTEGRATION								
TOTAL COST (BP-1100)					80			5.1

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

Milestones

	FY-00	FY-01
Contract Date (Month/CY)	03/00	11/00
Delivery Date (Month/CY)	09/00	05/01

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: ANG/AFRES TARGETING PODS (PATS) MN-F16PTS  
 Models of Aircraft Affected: F-16 BLOCK 25/30/32  
 Center: ASC - Wright Patterson AFB, OH  
 UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT  
 Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: F-16  
 PE 0207133F Team POWER

**Description/Justification**

This project is to provide precision weapon delivery capability to the ANG/AFRES. The initial procurement contract was awarded Aug 98 and is being managed by ASC/FBL. GRE/A funding was provided for FY98. This FY99 budget continues procurement of Precision Attack Targeting System (PATS) pods for use on the Pre-Block 40 ANG/AFRES aircraft. Future GRE/A funding is planned to continue procurement through FY 02 to support this project.

Aircraft Breakdown: Active 0, Reserve 6, ANG 8

**Development Status**

No development required. This is procurement of NDI pods.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR			14	18.6								
EQUIPMENT												
EQUIP NONREC			[2]	0.2								
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
PMA												
PYLONS			[25]	0.8								
OGC				0.4								
ICS				2.7								
TOTAL COST (BP-1100)			14	23.0								

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-F16PTS ANG/AFRES TARGETING PODS (PATS)  
(Continued)

	FY-04 QTY	COST	FY-05 QTY	COST	TO COMP QTY	COST	TOTAL QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR							14	18.6
EQUIPMENT								
EQUIP NONREC							[2]	0.2
CHANGE ORDERS								
DATA								
SIM/TRAINER								0.1
SUPPORT-EQUIP								0.3
PMA							[25]	0.8
PYLONS								0.4
OGC								2.7
ICS								
TOTAL COST (BP-1100)							14	23.0

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 15 Months

Follow-On Lead Time: 0 Months

**Milestones**

	FY-99	FY-00
Contract Date (Month/CY)	12/98	
Delivery Date (Month/CY)	03/00	

02/15/2000

FY 2001 PBR

Modification Title and No: THEATER AIRBORNE RECONNAISSANCE SYSTEM MN-F16TAR

Models of Aircraft Affected:

Center: ASC - Wright Patterson AFB, OH

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16

PE 0207133F Team POWER

**Description/Justification**

The Theater Airborne Reconnaissance System (TARS) fills a niche for manned fighter-rece in the era of Unmanned Air Vehicles (UAV). TARS provides an under-the-weather electro-optical (visible light) image collection capability in a medium-to-high threat environment. We are procuring additional TARS equipment/spares to include additional Medium Altitude Electro Optical Sensors. This modification was Congressional directed and is not a new start.

Aircraft Breakdown: Active 0, Reserve 0, ANG 5

**Development Status**

N/A.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR					[5]	5.5						
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
MOD OF SPARES					[1]	1.1						
TOTAL COST (BP-1100)												
(Totals may not add due to rounding)												6.6

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-F16TAR THEATER AIRBORNE RECONNAISSANCE SYSTEM

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR					[5]	5.5		
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
MOD OF SPARES					[1]	1.1		
TOTAL COST (BP-1100)						6.6		

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

Milestones

FY-00

Contract Date (Month/CY) 06/00

Delivery Date (Month/CY) 12/00

Installation Schedule

	FY-00			
	Quarters	1	2	3
Input				
Output				4



PE 0207133F Team POWER

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-F18001 F110-GE-100/129 #4 BEARING  
(Continued)

		FY-04		FY-05		TO COMP		TOTAL	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)									
PROCUREMENT (3010)									
INSTALL KITS								130	3.0
KITS NONRECUR									
EQUIPMENT									
EQUIP NONREC									
CHANGE ORDERS									
DATA									
SIM/TRAINER									
SUPPORT-EQUIP									
INSTALLATION OF HARDWARE									
FY-00 72 KITS								[72]	0.3
FY-01 44 KITS								[44]	0.1
FY-02 14 KITS								[14]	0.0
TOTAL INSTALL								130	0.5
TOTAL COST (BP-1100)								130	3.5

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 9 Months

Follow-On Lead Time: 9 Months

Milestones

	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	03/00	12/00	12/01	12/01
Delivery Date (Month/CY)	12/00	09/01	09/02	

Installation Schedule

	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input		18 18 18 18	11 11 11 11	11 11 11 11
Output		18 18 18 18	11 11 11 11	11 11 11 11

02/15/2000

FY 2001 PBR

Modification Title and No: -229 HPT OD FLOWPATH CIP TASK MN-F19401

Models of Aircraft Affected: F-16 BLOCK 52

Center: ASC - Wright Patterson AFB, OH

PE 0207133F Team POWER

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16

**Description/Justification**

Provides redesigned high pressure turbine parts to reduce the step between first vane and first blade outer diameter platforms to eliminate potential for recirculation of hot air and unburned hydrocarbons on the F100-PW-229 engine. This mixture can ignite and cause melting of the first blade outer air seal. FY98-FY04 installations are accomplished concurrently with the Falcon 229 Engine Upgrade modification MN-19229E at depot as part of scheduled maintenance (no installation dollars required). This mod affects engine installs, spare engines, and spare components (not installed). This safety mod reduces the class A rate by 0.78/100,000 engine flying hours.

Aircraft Breakdown: Active 44, Reserve 0, ANG 21

**Development Status**

Complete. Funded through the Engine Component Improvement Program (CIP).

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR	3	0.1	9	0.2	20	0.5	10	0.2	7	0.2	16	0.4
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
MOD OF SPARES					[4]	0.1	[4]	0.1	[4]	0.1	[2]	0.0
INSTALLATION OF HARDWARE												
FY-98 3 KITS												
FY-99 9 KITS												
FY-00 20 KITS												
FY-01 10 KITS												
FY-02 7 KITS												
FY-03 16 KITS												
TOTAL INSTALL												
TOTAL COST (BP-1100)	3	0.1	9	0.2	20	0.6	10	0.3	7	0.3	16	0.4

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-F19401 -229 HPT OD FLOWPATH CIP TASK  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDTE&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
MOD OF SPARES				
INSTALLATION OF HARDWARE				
FY-98	3	KITS		
FY-99	9	KITS		
FY-00	20	KITS		
FY-01	10	KITS		
FY-02	7	KITS		
FY-03	16	KITS		
TOTAL INSTALL				
TOTAL COST (BP-1100)			65	1.9

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

#### Milestones

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)	03/98	03/99	12/99	10/00	12/01	12/02	
Delivery Date (Month/CY)	03/99	03/00	12/00	10/01	12/02	12/03	

#### Installation Schedule

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Quarters	1	2	3	4	1	2	3
Input							
Output							

FY 2001 PBR

Models of Aircraft Affected: F-16 BLOCK 30/40/50

Center: ASC - Wright Patterson AFB, OH

PE 0207133F Team POWER

**Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16 Class P**

<b>Description/Justification</b>	<p>This retrofit improves the reliability and maintainability of the driver line replaceable unit (LRU) on the F110 digital engine control (DEC) and provides on-wing reprogramming capability for the Block 30/40/50. Currently, the DEC cannot be reprogrammed without removing it from an engine. On-wing reprogramming will provide significant O&amp;S savings and allow implementation of operational capability improvements. Only bought 510 kits because some were delivered with engines and were paid by engine cost. Mod incorporated at depot as part of scheduled maintenance (no installation funds required).</p>
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Aircraft Breakdown: Active 231, Reserve 36, ANG 243

**Development Status**  
Complete. Funded through the Engine Component Improvement Program (CIP).

PRIOR	FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST

PROCUREMENT (3010)

KITS NONRECUR

EQUIP NONR

## DATA

## SUPPORT-EQU

**FY-99 142 KITS**

**FY-01 128 KITS**

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

142	0.9	240	1.6	128	0.9
-----	-----	-----	-----	-----	-----

**Table 1**

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(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-F19410 F110 DEC HARDWARE RETROFIT

(Continued)

FY-04	FY-05	TOTAL
QTY COST	QTY COST	QTY COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

INSTALLATION OF HARDWARE

FY-99 142 KITS

FY-00 240 KITS

FY-01 128 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 9 Months

Follow-On Lead Time: 14 Months

Milestones

FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY) 09/98	03/99	03/00	03/01	03/02	
Delivery Date (Month/CY) 06/99	05/00	05/01	05/02	05/03	

Installation Schedule

FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4					
Input					
Output					

02/15/2000

FY 2001 PBR

Modification Title and No: F110-GE-129 EMS IMPROVEMENTS MN-F19412

Models of Aircraft Affected: F-16 BLOCK 30/40/50

Center: ASC - Wright Patterson AFB, OH

PE 0207133F Team POWER

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16 Class P

**Description/Justification**

Produce a commercial parts based interface transparent replacement for the existing engine monitoring system computer (EMSC) with improved reliability and an ongoing obsolescence management program for the life of the weapon system. Forced retrofit implementation. Current funding covers the -129 engines (Block 50) only.

Aircraft Breakdown: Active 172, Reserve 0, ANG 0

**Development Status**

Development to complete Sep 99. Funded through the Engine Component Improvement Program (CIP).

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC			102	2.4			70					
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
TOTAL COST (BP-1100)			102	2.4			70					1.7

(Totals may not add due to rounding)

UNCLASSIFIED

	FY-04 QTY	COST	FY-05 QTY	COST	TO COMP QTY	COST	TOTAL QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KIT'S NONRECUR							172	4.1
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
TOTAL COST (BP-1100)							172	4.1
(Totals may not add due to rounding)								

Method of Implementation: ORG/INTERMEDIATE  
 Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	03/00	09/00	12/00	06/01
Delivery Date (Month/CY)				





(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-F19413 GE-129 TURBINE FRAME COMPOSITE FAIRING

(Continued)

FY-04		FY-05		TO COMP		TOTAL	
QTY	COST	QTY	COST	QTY	COST	QTY	COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

TOTAL COST (BP-1100)						268	3.2
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(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 12 Months

Follow-On Lead Time: 9 Months

**Milestones**

Contract Date (Month/CY)	FY-00	FY-01	FY-02	FY-03
Delivery Date (Month/CY)	12/99	12/00	12/01	12/02
	12/00	09/01	09/02	09/03

02/15/2000

FY 2001 PBR

Modification Title and No: PW-229 3rd STAGE FAN IMPROVEMENTS MN-F19451

Models of Aircraft Affected: F-16 Block 52

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: F-16

PE 0207133F Team POWER

#### Description/Justification

Provides revised 3rd fan blade/disk attachment and 3rd stator vane design to lower operating stress and increase safety margin for the F100-PW-229 engine. Redesigned 3rd stators will eliminate bow wake-induced stress on the 3rd stator. This repair procedure alone will save \$70K per engine depot visit. Three engines have experienced 3rd disk/blade attachment cracking. Cracks were discovered in fielded engines on the 3rd disk attachments. Without corrective action, cracks will lead to liberated blades causing a catastrophic Non-Recoverable Inflight Shutdown (NRIFSD) of the engine. Baseline risk without corrective action is 0.124 NRIFSD/100K engine flying hours (EFHs). Replacement during scheduled maintenance (no installation funding required).

New start notification is currently being staffed for submittal to Congress. No FY00 funds will be obligated for this effort until congressionally-approved.

Aircraft Breakdown: Active 28, Reserve 0, ANG 21

#### Development Status

Expected Completion date Feb 00. Development through Engine CIP Program.

#### Projected Financial Plan

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR					6	0.3	21	1.1	2	0.1	20	1.0
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA						0.0						
SIM/TRAINER												
SUPPORT-EQUIP												
INSTALLATION OF HARDWARE												
FY-00	6	KITS										
FY-01	21	KITS										
FY-02	2	KITS										
FY-03	20	KITS										
TOTAL INSTALL												
TOTAL COST (BP-1100)	6		0.3		21	1.1	2	0.1	20	1.0		

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-F19451 PW-229 3rd STAGE FAN IMPROVEMENTS

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
INSTALLATION OF HARDWARE				
FY-00 6 KITS				
FY-01 21 KITS				
FY-02 2 KITS				
FY-03 20 KITS				
TOTAL INSTALL				
TOTAL COST (BP-1100)				
(Totals may not add due to rounding)				

Method of Implementation: DEPOT Initial Lead Time: 1 Month Follow-On Lead Time: 1 Month

Milestones

	FY-00	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)	04/00	12/00	12/01	12/02	
Delivery Date (Month/CY)	05/00	01/01	01/02	01/03	

Installation Schedule

	FY-00	FY-01	FY-02	FY-03	FY-04
Quarters	1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4
Input		3 3 6 5	5 5 5 5	1 1 5 5	5
Output		3 3 6 5	5 5 5 5	1 1 5 5	5

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: PW-229 2nd STAGE FAN IMPROVEMENTS MN-F19452  
 Models of Aircraft Affected: F-16 Block 52

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: F-16  
 PE 0207133F Team POWER

**Description/Justification**  
 Provides improved design 2nd stage fan stators for the F100-PW-229 engine. New stators will reduce vane airfoil chordwise bending mode to an acceptable level. Eight engines have been found with 2nd stage fan vane cracking; two had liberated pieces and one caused compressor damage. Liberated pieces can stall an engine and result in a Non-Recoverable Inflight Shutdown (NRIFSD), Class A event. Class A rate without improvements is 0.75/100K engine flight hours (EFHs). Mod eliminates safety risk. Cost Effective Analysis is \$8.81 M [net present value (NPV)@5%]. Component Improvement Program task 11-349R097Z. Baseline risk without corrective action is 0.816 NRIFSD/100K EFHs.

New start notification is currently being staffed for submittal to Congress. No FY00 funds will be obligated for this effort until congressionally-approved.

Aircraft Breakdown: Active 29, Reserve 0, ANG 21

**Development Status**  
 Expected Completion date Feb 00. Development through Engine CIP Program.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR					12	0.3	38	1.0				
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA						0.0						
SIM/TRAINER												
SUPPORT-EQUIP												
TOTAL COST (BP-1100)					12	0.3	38	1.0				

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: F-16 MN-F19452 PW-229 2nd STAGE FAN IMPROVEMENTS

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR							50	1.3
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.0
SIM/TRAINER								
SUPPORT-EQUIP								
TOTAL COST (BP-1100)							50	1.3

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 8 Months

Follow-On Lead Time: 8 Months

**Milestones**

	FY-00	FY-01
Contract Date (Month/CY)	03/00	12/00
Delivery Date (Month/CY)	11/00	08/01

## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)										DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications					P-1 ITEM NOMENCLATURE: T/AT-37					
	1999	2000	2001	2002	2003	2004	2005			
COST (In Mil)	\$0.089	\$0.083	\$0.083	\$0.083	\$0.081	\$0.084	\$0.085			

The T-37 is a twin engine, two seat (side-by-side), subsonic jet trainer used by AETC as a primary trainer in Undergraduate Pilot and Navigator Training. The overall goal of the modification budgeted in FY01 is to enhance flight safety while improving reliability and maintainability. The specific modification budgeted and programmed is below.

CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
P-S	99999A	LOW COST SAFETY MO	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.7
TOTAL FOR CLASS P-S											
P	99999X	LOW COST MODIFICATI	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.7
	Z88888	REPROGRAMMINGS	0.1	0.1							0.8
TOTAL FOR CLASS P											
			0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.9
TOTAL FOR AIRCRAFT AT-37											
			0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.0	1.6

Totals may not add due to rounding.

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)					DATE February 2000	
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: C-5			
	1999	2000	2001	2002	2003	2004
						2005
COST (In Mil)	\$82.646	\$77.582	\$95.401	\$144.631	\$263.377	\$340.473
						\$488.624

This line item funds modifications to the C-5 aircraft. The four engine C-5 carries outsized and heavy cargo (tanks, helicopters, etc.) between main operating bases. The aircraft routinely carries 73 troops and 36 standard 463-L pallets. The primary modifications budgeted in FY01 are the TF-39 High Pressure Turbine (HPT) and Avionics Modernization Program (AMP). Other modifications enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

CLASS P	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IQ GO	TOTAL PROG.
	3150	NAVSTAR GLOBAL POS	15.0	0.4							92.6
	3455	AIRLIFT DEFENSIVE SY	5.1	2.1	0.4						27.1
	6032	COMPARTMENT FLOO	0.1	1.4							6.2
	6037	TF39 ENGINE HIGH PR	41.0	31.8	35.3	12.5					180.3
	6038	AVIONICS MODERNIZA	10.3	27.7	59.6	114.8	131.5	21.9	2.5		368.2
	6103	HYDRAULIC SURGE CO		2.9							2.9
	6151	FUEL FLOW INDICATO	6.6								6.6
	6154	C-5 RELIABILITY ENHA			17.3		128.7	318.5	486.0	4,399.2	5,349.8
	7788	FUEL FLOW TRANSMIT		2.6							2.6
	8097	SIM UPGRADE					3.0				3.0
	96004	8.33 RADIO	2.5								16.4
	99999X	LOW COST MODIFICATI		0.1	0.1	0.1	0.1	0.1	0.1		3.6
	DC101	FM IMMUNITY		3.3							6.8
	Z88888	REPROGRAMMINGS	2.2	5.5							3.7
TOTAL FOR CLASS P			82.7	77.7	95.4	144.6	263.4	340.5	488.6	4,399.2	6,069.7

Totals may not add due to rounding.

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ITEM NO. 36PAGE NO.  
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**UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE February 2000					
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications		P-1 ITEM NOMENCLATURE: C-5					
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005
	\$82.646	\$77.582	\$95.401	\$144.631	\$263.377	\$340.473	\$488.624

This line item funds modifications to the C-5 aircraft. The four engine C-5 carries outsized and heavy cargo (tanks, helicopters, etc.) between main operating bases. The aircraft routinely carries 73 troops and 36 standard 463-L pallets. The primary modifications budgeted in FY01 are the TF-39 High Pressure Turbine (HPT) and Avionics Modernization Program (AMP). Other modifications enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

CLASS	MOD NR	MODIFICATION TITLE	COST							TOTAL PROG.	
			FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05		TO GO
TOTAL FOR AIRCRAFT C-5			82.7	77.7	95.4	144.6	263.4	340.5	488.6	4,399.2	6,069.7

**Totals may not add due to rounding.**

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02/15/2000

FY 2001 PBR

Modification Title and No: NAVSTAR GLOBAL POSITIONING SYSTEM MN-3150

Models of Aircraft Affected: C-5 A/B

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0401119F Team MOBIL

Appropriation: Aircraft Procurement, Air Force  
CLC: C-5

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

**Description/Justification**

This NAV/Safety modification satisfies the requirement for GPS. Modification installs a Rockwell FMS-800 system, Buss System Interface Units, Antenna, electronic units, data loader / cartridge and a mission planning system (AFMSS). FY96 install is the prototype. FY98 funds became available from mod #6152, Anti-Skid Reliability. This mod is baselined with AMP (MN 6038) and 8.33KHz Radio (MN 96004).

Aircraft Breakdown: Active 82, Reserve 32, ANG 12

**Development Status**

N/A

**Projected Financial Plan**

RDT&E (3600)

**PROCUREMENT (3010)**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
INSTALL KITS	126	6.2				
KITS NONRECUR		3.5				
EQUIPMENT	[126]	28.2				
EQUIP NONREC		0.9				
CHANGE ORDERS		4.6				
DATA			1.0			0.2
SIM/TRAINER	[22]	19.3				
SUPPORT-EQUIP		9.9	1.4			
SOFTWARE		1.8	3.7			
FLIGHT TEST		0.5				
KIT REPLENISHMENT		0.1				
OGC			0.0			0.1
INSTALLATION OF HARDWARE						
FY-94	[1]					
1 KITS						
FY-95	[26]	2.2	1.0			
37 KITS						
FY-96			7.9			
88 KITS			[2]			0.2
TOTAL INSTALL	27	2.2	97	2	2	0.2
TOTAL COST (BP-1100)	126	77.3	15.0			0.4

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-5 MN-3150 NAVSTAR GLOBAL POSITIONING SYSTEM

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					126			6.2
KITS NONRECUR							[126]	3.5
EQUIPMENT								28.2
EQUIP NONREC								0.9
CHANGE ORDERS								4.6
DATA								1.1
SIM/TRAINER					[22]			19.3
SUPPORT-EQUIP								1.4
SOFTWARE								13.6
FLIGHT TEST								1.8
KIT REPLENISHMENT								0.5
OGC								0.1
INSTALLATION OF HARDWARE								
FY-94 1 KITS							[1]	
FY-95 37 KITS							[37]	3.2
FY-96 88 KITS							[88]	8.1
TOTAL INSTALL					126			11.3
TOTAL COST (BP-1100)					126			92.6

(Totals may not add due to rounding)

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 33 Months

Follow-On Lead Time: 18 Months

#### Milestones

	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
Contract Date (Month/CY)	12/93	06/96	06/96				
Delivery Date (Month/CY)	09/96	12/97	12/97				

#### Installation Schedule

	FY-94		FY-95		FY-96		FY-97		FY-98		FY-99		FY-00	
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Input									4	1	2	3	4	1
Output									4	11	11	11	24	24
									4	11	11	24	24	24
									4	11	11	24	24	24

02/15/2000

FY 2001 PBR

Modification Title and No: AIRLIFT DEFENSIVE SYSTEMS MN-3455

Models of Aircraft Affected: C-5

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0401119F Team MOBIL

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT  
Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-5**Description/Justification**

The electronic warfare defensive systems will consist of a missile warning receiver, and a flare dispenser. FY93 was continuation of Snowstorm program (AAR/ALE-40) and also served as start of this mod. The 4 retrofit kits in FY95 are to refit these and the first 2 Snowstorm aircraft with AAR/ALE -47. The AAR/ALE-47 are the 2 major group 'B' components. These are managed by another program office. Our procurement (funding) of these group 'B' components is dictated by their program office acquisition schedule, which drove our FY94 and FY96 group 'B' procurement. Initial leadtime based on FY95 group 'A' sole source to Lockheed Martin to meet users schedule. Follow-on leadtime based on group 'A' competitive contract with Boeing as both kitter and installer. Group 'A' is used to determine the contract / delivery dates. In 3rd qtr FY98 AMC requested acceleration of balance of program.

Aircraft Breakdown: Active 49, Reserve 0, ANG 0

**Development Status**

N/A

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

FLIGHT TEST

RETROFIT

SOFTWARE

OGC

**INSTALLATION OF HARDWARE**

FY-93 2 KITS

FY-95 6 KITS

FY-98 21 KITS

FY-99 20 KITS

TOTAL INSTALL

TOTAL COST (BP-11000)

(Totals may not add due to rounding)

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
29	4.8	20	1.2			
[29]	1.4	[20]	2.1			
	3.7					
	1.1					
	0.2					
[11]	1.1					
	1.4					
	0.1					
[4]	1.9					
	0.0					
	0.0					
	0.0					
	2.6					
[2]	0.9					
[6]	0.3					
[2]	0.3	[17]	1.8	[2]	0.2	
			[15]	1.3	[5]	0.4
10	3.8	17	1.8	17	1.5	5
						0.4
29	19.6	20	5.1	2.1		0.4

(Continued)

UNCLASSIFIED

Fact Sheet: C-5 MN-3455 AIRLIFT DEFENSIVE SYSTEMS  
(Continued)

	FY-04	FY-05	TOTAL
	QTY	COST	QTY
RDTE&E (3600)			
PROCUREMENT (3010)			
INSTALL KITS			49
KITS NONRECUR			6.0
EQUIPMENT			1.4
EQUIP NONREC			[49] 5.8
CHANGE ORDERS			1.1
DATA			0.2
SIM/TRAINER			[11] 1.1
SUPPORT-EQUIP			1.4
FLIGHT TEST			0.1
RETROFIT			[4] 1.9
SOFTWARE			0.6
OGC			0.0
INSTALLATION OF HARDWARE			
FY-93			[2] 2.6
2 KITS			[6] 0.9
FY-95			[21] 2.2
6 KITS			[20] 1.7
FY-98			49
21 KITS			7.5
FY-99			
20 KITS			
TOTAL INSTALL			
TOTAL COST (BP-1100)			49 27.1
(Totals may not add due to rounding)			

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	12/92	12/94	12/94	12/98	12/98	06/98	06/99		
Delivery Date (Month/CY)	06/93	03/98							

**Installation Schedule**

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	2	2	2	2	2	2	2	2
Output	2	2	2	2	2	2	2	2
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	5	5	5	5	5	5	5	5
Output	5	5	5	5	5	5	5	5

UNCLASSIFIED

PE 0401119F  
Team MOBIL

UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: C-5 MN-6032 COMPARTMENT FLOOR CORROSION PREVENTION

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RD1&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					70	4.1		
KITS NONRECUR					1	0.6		
EQUIPMENT						0.0		
EQUIP NONREC								
CHANGE ORDERS								
DATA						0.1		
SIM/TRAINER								
SUPPORT-EQUIP								
OGC						0.0		
INSTALLATION OF HARDWARE								
FY-96 52 KITS							[52]	1.0
FY-98 19 KITS							[19]	0.4
TOTAL INSTALL					71	1.4		
TOTAL COST (BP-1100)					71	6.2		

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 9 Months

Follow-On Lead Time: 13 Months

Milestones

Contract Date (Month/CY) 06/98  
Delivery Date (Month/CY) 03/99

FY-96 FY-97 FY-98 FY-99 FY-00 FY-01

Installation Schedule

	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input						
Output						



PE 0401119F Team MOBIL

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-5 MN-6037 TF39 ENGINE HIGH PRESSURE TURBINE

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR							665	153.5
EQUIPMENT								4.1
EQUIP NONREC								
CHANGE ORDERS								0.1
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
MOD OF SPARES							[125]	22.6
TOTAL COST (BP-1100)							665	180.3

(Totals may not add due to rounding)

Method of Implementation: DEPOT OVERHAUL

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	06/97	12/97	12/98	12/99	12/00	
Delivery Date (Month/CY)	12/97	06/98	06/99	06/00	06/01	

02/15/2000

FY 2001 PBR

Modification Title and No: AVIONICS MODERNIZATION PROGRAM MN-6038

Models of Aircraft Affected: C-5A/B/C

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0401119F Team MOBIL

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-5**Description/Justification**

This GATM/NAV Safety modification combines two major efforts. It redesigns the avionics components to replace low reliability line replacement units (LRU) in the autopilot/flight augmentation systems and the flight and engine instrument suite. This mod also installs safety equipment: Traffic Alert and Collision Avoidance System (TCAS) and Terrain Awareness and Warning System (TAWS). TCAS has approximately a 10 month lead time, with a scheduled completion date of the end of FY02. In addition, installation of new communication, navigation and surveillance equipment will improve air traffic management under Global Air Traffic Management (GATM) taking advantage of optimum air routes. Connectivity to Mobility command and control capabilities will also be incorporated in the AMP design. This mod involves Group B only. It removes and replaces existing Group B components - no Group A (install kits) necessary. Mod is baselined with GPS (mod #3150).

Aircraft Breakdown: Active 82, Reserve 32, ANG 12

**Development Status**

RDT&E supports system engineering, COTS identification and interfacing hardware design, software design, and data design. Program risk is being mitigated by use of a single (competitive) source for integration and development, kits, installation and option for follow-on support. PDR is scheduled for 2nd quarter FY00 and CDR is scheduled for 4th quarter FY00. Development also includes a flight tested prototype (buy FY99 install FY00) and a kitproof (buy FY99 install FY00). Overlap with 3010 is predicated upon need to procure TCAS kits while avionics development is still in process. Avionics development will not impact TCAS.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		3.2	[2]	37.3		40.4		44.9		46.5		0.2
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONREC												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER			[15]	3.0			[3]	2.0		4.5		4.9
SUPPORT-EQUIP								0.2	[3]	3.7	[3]	2.7
ATD INTEGRATION								0.2		3.5		3.8
MTD KITS			[1]	1.5	[15]	7.3	[3]	4.9	[3]	10.9	[5]	4.0
TCAS			[26]	1.1	[1]	2.8	[1]	10.2	[1]	4.5		9.5
INSTALLATION OF H			[26]	3.7	[68]	12.8	[32]	4.7				
OGC				1.1	[68]	4.7	[32]	1.0		1.8		2.5
INSTALLATION OF HARDWARE						0.1		0.5				
FY-01 16 KITS									[16]	4.8		
FY-02 50 KITS											[50]	13.1
FY-03 58 KITS												
TOTAL INSTALL												
TOTAL COST (BP-1100)				10.3		27.7	16	59.6	16	4.8	50	13.1
(Totals may not add due to rounding)										114.8	58	131.5

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UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: C-5 MN-6038 AVIONICS MODERNIZATION PROGRAM  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RD&E (3600)					[2]		[2]	172.5
PROCUREMENT (3010)								
INSTALL KITS							124	200.7
KIT'S NONRECUR								
EQUIPMENT								9.4
EQUIP NONREC								8.5
CHANGE ORDERS								16.9
DATA							[26]	13.3
SIM/TRAINER	[2]	2.6						34.1
SUPPORT-EQUIP		3.1					[4]	18.5
ATD INTEGRATION				2.5			[126]	21.2
MID KITS							[126]	6.7
TCAS								4.9
INSTALLATION OF H								
OGC								
INSTALLATION OF HARDWARE								
FY-01 16 KITS							[16]	4.8
FY-02 50 KITS							[50]	13.1
FY-03 58 KITS	[58]	16.1					[58]	16.1
TOTAL INSTALL	58	16.1					124	34.0
TOTAL COST (BP-1100)		21.9		2.5			124	368.2
(Totals may not add due to rounding)								

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

Milestones

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
Contract Date (Month/CY)			12/98	12/99	12/00	12/01	12/02	12/03	12/04
Delivery Date (Month/CY)			12/99	12/00	12/01	12/02	12/03	12/04	

Installation Schedule

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
Quarters	1	2	3	4	1	2	3	4	1
Input									
Output									
Quarters	1	2	3	4	1	2	3	4	1
Input									
Output									

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

02/15/2000  
FY 2001 PBR  
Modification Title and No: HYDRAULIC SURGE CONTROL -EASY OPEN VALVE MN-6103  
Models of Aircraft Affected: C-5A/B  
Center: WR-ALC Warner Robins AFB Warner Robins, GA  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-5  
PE 0401119F  
Team MOBIL  
Exhibit P3A Congressional

**Description/Justification**

This modification installs hydraulic selector valves that are designed to open at a slightly lower rate to prevent surges and pressure spikes in the hydraulic system. Modified valves are to replace current ones associated with the selector valve on the landing gear, cargo doors and ramps.

Aircraft Breakdown: Active 82, Reserve 32, ANG 12

**Development Status**

N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS					126	2.7						
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
TOTAL COST (BP-1100)					126	2.9						

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-5 MN-6103 HYDRAULIC SURGE CONTROL -EASY OPEN VALVE

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					126		126	2.7
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.2
SIM/TRAINER								
SUPPORT-EQUIP								
TOTAL COST (BP-1100)					126		126	2.9

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 8 Months

Follow-On Lead Time: 0 Months

**Milestones**

Contract Date (Month/CY)	FY-97	FY-98	FY-99	FY-00
Delivery Date (Month/CY)			05/00	01/01

02/15/2000

FY 2001 PBR

Modification Title and No: FUEL FLOW INDICATOR MN-6151

Models of Aircraft Affected: C-5A/B/C

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0401119F Team MOBIL

Appropriation: Aircraft Procurement, Air Force  
CLC: C-5

Exhibit P3A Congressional

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

**Description/Justification**

This modification replaces fuel flow indicator. This program was originally composed of both indicator and transmitter. During testing the transmitter required more integration effort while the indicator was ready for production. Since the indicator is also a high failure item it was more cost effective to procure and install the new indicator in lieu of buying the older poor performing indicator. Therefore, to save money and improve aircraft reliability, mod 6151 was split into mod 6151 and mod 7788. ( In 1995, the indicator failed 278 times. Repairing these failures and replacing condemned units is costly in terms of dollars, manpower and reduced mission capability). Quantity per aircraft is 2 indicators.

Aircraft Breakdown: Active 82, Reserve 32, ANG 12

**Development Status**

N/A

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

MOD OF SPARES

OGC

PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
QTY	COST	QTY	COST	QTY	COST

126

5.7

[13]

0.5

0.4

0.0

TOTAL COST (BP-1100)

126

6.6

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-5 MN-6151 FUEL FLOW INDICATOR  
(Continued)

	FY-04 QTY	COST	FY-05 QTY	COST	TO COMP QTY	COST	TOTAL QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							126	5.7
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
MOD OF SPARES								
OGC								
TOTAL COST (BP-1100)							126	6.6

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 9 Months

Follow-On Lead Time: 0 Months

**Milestones**

Contract Date (Month/CY)	FY-98	FY-99	FY-00
Delivery Date (Month/CY)		09/99	06/00



02/15/2000  
 FY 2001 PBR  
 Modification Title and No: FUEL FLOW TRANSMITTER MN-7788  
 Models of Aircraft Affected: C-5A/B  
 Center: WR-ALC Warner Robins AFB Warner Robins, GA  
 PE 0401119F Team MOBIL  
 UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT  
 Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: C-5

**Description/Justification**  
 This modification replaces the fuel flow transmitter. This program was originally included in mod 6151. During testing the transmitter required more integration effort while the indicator was ready for production. Since the indicator is also a high failure item it was more cost effective to procure and install the new indicator in lieu of buying the older poor performing indicator. Therefore, to save money and improve aircraft reliability, mod 6151 was split into mod 6151 and mod 7788. (In 1995, the transmitter failed 338 times. Repairing these failures and replacing condemned units is costly in terms of dollars, manpower and reduced mission capability. Replacing these units with more reliable, state of the art units will result in reduced aircraft delays and increased aircraft availability). Quantity per aircraft is 4 transmitters and 2 indicators.

Aircraft Breakdown: Active 82, Reserve 32, ANG 12

**Development Status**  
 N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RD&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR					126	2.3						
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
MOD OF SPARES												
TOTAL COST (BP-1100)					126	2.6						
(Totals may not add due to rounding)												

UNCLASSIFIED

(Continued)

	FY-04 QTY	COST	FY-05 QTY	COST	TO COMP QTY	COST	TOTAL QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							126	2.3
KITS NONRECUR EQUIPMENT								
EQUIP NONREC CHANGE ORDERS								
DATA								
SIM/TRAINER								0.3
SUPPORT-EQUIP MOD OF SPARES								
TOTAL COST (BP-1100)							126	2.6
(Totals may not add due to rounding)								

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 12 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-00  
Contract Date (Month/CY) 02/00  
Delivery Date (Month/CY) 02/01

02/15/2000

FY 2001 PBR

Modification Title and No: 8.33 RADIO MN-96004

Models of Aircraft Affected: C-5

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: WR-ALC Warner Robins AFB Warner Robins, GA

Appropriation: Aircraft Procurement, Air Force  
CLC: C-5

PE 0401119F Team MOBIL

Description/Justification

The C-5 fleet requires a multi-mode VHF radio incorporating 8.33 KHz channel spacing to meet European airspace requirements. In addition, this modification installs UHF secure voice, Have Quick, and UHF SATCOM radios. This is a Global Air Traffic Management (GATM) modification. This mod is baselined with GPS (MN 3150).

Aircraft Breakdown: Active 82, Reserve 32, ANG 12

Development Status

N/A

Projected Financial Plan

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KIT'S NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

OGC

INTEGRATION

INSTALLATION OF HARDWARE

FY-98 126 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	126	11.1										
		1.7										
		0.6										
				0.6								
	[11]	0.5										
		0.0										
				0.0								
				0.9								
				1.0								
			[126]									
			126	1.0								
				2.5								
	126	13.9										

(Continued)

UNCLASSIFIED

Fact Sheet: C-5 MN-96004 8.33 RADIO

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							126	11.1
KITS NONRECUR								1.7
EQUIPMENT								0.6
EQUIP NONREC								0.6
CHANGE ORDERS								0.5
DATA							[11]	
SIM/TRAINER								0.1
SUPPORT-EQUIP								0.9
OGC								
INTEGRATION								
INSTALLATION OF HARDWARE								
FY-98 126 KITS							[126]	1.0
TOTAL INSTALL							126	1.0
TOTAL COST (BP-1100)							126	16.4

(Totals may not add due to rounding)

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 3 Months

Follow-On Lead Time: 0 Months

Milestones

FY-97 FY-98 FY-99  
Contract Date (Month/CY) 09/98  
Delivery Date (Month/CY) 12/98

Installation Schedule

	FY-97	FY-98	FY-99
Quarters	1 2 3 4	1 2 3 4	1 2 3 4
Input	32 31 32 31	32 31 32 31	32 31 32 31
Output	32 31 32 31	32 31 32 31	32 31 32 31

**Models of Aircraft Affected:**

## UNCLASSIFIED

## MODIFICATION OF AIRCRAFT

Center: WR-ALC Warner Robins AFB Warner Robins, GA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-5 Class P

PE 0401119F Team MOBIL

**Description/Justification**

**TESTIMONY OF SENATOR FRANK R. LUTER**

This is not a New Start. FY00 funding for effort resulted from a Congressional Appropriations Committee plus-up for GATM efforts, one of which is FM Immunity. The C-5 Fleet requires VOR/ILS receiver kits to provide protection from interference in the FM broadcast band (FM Immunity) adjacent to the aeronautical radio navigation band which represents a serious safety risk to U.S. military personnel and assets. In recognition of the increased risk, nations will impose substantial operational restrictions upon aircraft, both civil and state, equipped with non-immune VHF receivers. The problem is imminent in the European theatre. Most European states will adopt and enforce operational restrictions beginning 1 January 2001. FY98 funds became available from mod #6152. Anti-Skid Reliability.

Aircraft Breakdown: Active 126, Reserve 0, ANG 0

### Development Status

## Complete

### Projected Financial Plan

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	[126]	2.2										
KITS NONRECUR												
EQUIPMENT	126	1.3										
EQUIP NONREC					[15]	1.8						
CHANGE ORDERS												
DATA												
SIM/TRAINER						1.5						
SUPPORT-EQUIP												
TOTAL COST (BP-1100)	126	3.5				3.3						
(Totals may not add due to rounding)												

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-5 MN-DC101 FM IMMUNITY  
(Continued)

	FY-04 QTY	COST	FY-05 QTY	COST	TO COMP QTY	COST	TOTAL QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							[126]	2.2
KITS NONRECUR								
EQUIPMENT							126	1.3
EQUIP NONREC							[15]	1.8
CHANGE ORDERS								
DATA								
SIM/TRAINER								1.5
SUPPORT-EQUIP								
TOTAL COST (BP-1100)							126	6.8

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

**Milestones**

Contract Date (Month/CY)	FY-98	FY-99	FY-00	FY-01	FY-02
Delivery Date (Month/CY)	02/00	02/00	02/01	02/01	08/01

## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: C-9			
	1999	2000	2001	2002	2003	2004
						2005
<b>COST (In Mil)</b>	\$14.155	\$15.100	\$3.271	\$4.707	\$7.970	\$14.804
						\$1.076

This line item funds modifications to the C-9 aircraft, commercial equivalent DC-9. The C-9A is a medium-range, twin-engine, jet transport designed to carry patients and medical personnel. The C-9C is used to transport the vice-president, cabinet members, members of Congress and other high ranking U.S. and foreign officials. The primary modification budgeted in FY01 is the Terrain Awareness and Warning System (TAWS). Other modifications budgeted enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

CLASS P	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
	3009	REENGINE	2.5	3.7	0.8						12.2
	3149T	TRAFFIC ALERT & COL	4.7								13.1
	6030	REDUCED VERTICAL S	3.8	4.4							8.2
	9709	GLOBAL AIR TRAFFIC				4.0	6.6	13.7			24.4
	99999S	SERVICE BULLETINS	0.6	0.7	0.6	0.7	0.8	1.0	1.0		19.8
	99999X	LOW COST MODIFICATI	0.2	0.1	0.1	0.1	0.6	0.1	0.1		4.7
	TAWS	TERRAIN AWARENESS	2.2	5.3	1.8						9.2
	Z88888	REPROGRAMMINGS	0.3	0.9							0.1
TOTAL FOR CLASS P			14.2	15.1	3.3	4.8	8.0	14.8	1.1	0.0	91.7
TOTAL FOR AIRCRAFT C-9			14.2	15.1	3.3	4.8	8.0	14.8	1.1	0.0	91.7

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 37	PAGE NO. 1
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02/15/2000

FY 2001 PBR

Modification Title and No: REENGINE MN-3009

Models of Aircraft Affected: C-9 ENGINES

## UNCLASSIFIED

## MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-9

PE 0401314F Team MOBIL

Description/Justification

This modification procures engine hush kits which comply with FAA/CAO mandated stage 3 noise restrictions. Engine hush kits are the most economical method for C-9 noise reduction. This modification will install engine hush kits and upgrade engine performance on three C-9C aircraft and two C-9A aircraft, and four spare engines. An install kit consists of the components to modify one aircraft. An equipment kit consists of the components to modify the associated (two) aircraft engines. A spare kit consists of the components to modify one spare aircraft engine. The \$1.1M shown in Equipment Nonrecurring modified the thrust reversers and nose cowl for the two A model aircraft. The cost to publish data is \$7.50 in FY00. The cost increases for installation and kits are reflected.

Aircraft Breakdown: Active 4, Reserve 0, ANG 0

Development Status

N/A

Projected Financial Plan

RDT&amp;E (3600)

## PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

MOD OF SPARES

## INSTALLATION OF HARDWARE

FY-98 2 KITS

FY-99 1 KITS

FY-00 1 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
2	3.0	1	1.5	1	1.5	
[2]	1.4	[1]	0.7	[1]	0.7	
	0.5					
[1]	0.4			[3]	1.1	[2]
		[2]	0.3			0.8
				[1]	0.2	
				[1]	0.2	
		2	0.3	2	0.3	
2	5.2	1	2.5	1	3.7	0.8



(Continued)

UNCLASSIFIED

Fact Sheet: C-9 MN-3009 REENGINE  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			4	6.0
KITS NONRECUR				
EQUIPMENT			[4]	2.9
EQUIP NONREC				0.5
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
MOD OF SPARES			[6]	2.3
INSTALLATION OF HARDWARE				
FY-98 2 KITS			[2]	0.3
FY-99 1 KITS			[1]	0.2
FY-00 1 KITS			[1]	0.2
TOTAL INSTALL			4	0.6
TOTAL COST (BP-1100)			4	12.2

(Totals may not add due to rounding)

Method of Implementation: CLS

Initial Lead Time: 6 Months

Follow-On Lead Time: 3 Months

Milestones

	FY-97	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	06/98	12/98	12/99	12/00	
Delivery Date (Month/CY)	12/98	03/99	03/00	03/01	

Installation Schedule

	FY-97	FY-98	FY-99	FY-00	FY-01
Quarters	1 2 3	4 1 2	3 4 1	2 3 4	1 2 3
Input			1	1	1
Output			1	1	1

02/15/2000

FY 2001 PBR

Modification Title and No: TRAFFIC ALERT & COLLISION AVOIDANCE SYSTEM MN-3149T

Models of Aircraft Affected: C-9A/C, AIREVAC AND DV

AIRCRAFT

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-9 Class P

PE 0401314F Team MOBIL

**Description/Justification**

This Nav/Safety mod installs a TCAS modification with two directional antennas, top and bottom, in the forward area of the aircraft, and a processor in the avionics bay. The current IFF transponder will be replaced by a dual-mode transponder including the Mode S capability required for TCAS II operation. The processor will generate traffic alerts and resolution advisories that will be displayed on Integrated Vertical Speed Indicators (IVSIs) on the pilot and copilot flight instruments panel. The system includes a minor software mod which allows the FMS to interface to the dual-mode transponder.

Aircraft Breakdown: Active 23, Reserve 0, ANG 0

**Development Status**

N/A.

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

OTHER

INSTALLATION OF HARDWARE

FY-97 9 KITS

FY-98 14 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
23	0.9											
[23]	1.9											
	2.3											
	1.7											
	0.8											
	0.0											
	0.1											
[5]	0.8		[4]	0.6								
			[14]	2.2								
5	0.8		18	2.8								
23	8.4											

UNCLASSIFIED

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			23	0.9
KITS NONRECUR				3.0
EQUIPMENT			[23]	2.3
EQUIP NONREC				2.2
CHANGE ORDERS				1.1
DATA				0.0
SIM/TRAINER				0.1
SUPPORT-EQUIP				
OTHER				
INSTALLATION OF HARDWARE				
FY-97 9 KITS			[9]	1.4
FY-98 14 KITS			[14]	2.2
TOTAL INSTALL			23	3.6
TOTAL COST (BP-1100)			23	13.1

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 3 Months

Follow-On Lead Time: 3 Months

**Milestones**

	FY-97	FY-98	FY-99
Contract Date (Month/CY)	12/96	12/97	
Delivery Date (Month/CY)	03/97	03/98	

**Installation Schedule**

	FY-97	FY-98	FY-99
Quarters	1 2 3 4 1 2 3 4 1 2 3 4		
Input		1 2 3 4 5 6	
Output		1 2 3 4 5 6	

UNCLASSIFIED

UNCLASSIFIED

Fact Sheet: C-9 MN-6030 REDUCED VERTICAL SEPARATION MINIMA  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					9	1.3		
KITS NONRECUR								
EQUIPMENT					[14]	4.9		
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
OGC						0.7		
INSTALLATION OF HARDWARE								
FY-99 0 KITS							[5]	0.6
FY-00 9 KITS							[6]	0.7
TOTAL INSTALL							11	1.3
TOTAL COST (BP-1100)							9	8.2

(Totals may not add due to rounding)

Method of Implementation: CLS

Initial Lead Time: 3 Months

Follow-On Lead Time: 3 Months

Milestones

	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	03/99	12/99	12/00	
Delivery Date (Month/CY)	06/99	03/00	03/01	

Installation Schedule

	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	1	3 3 2 2	3 3 3 3	
Output		1 3 3 2	3 3 3 3	

UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: C-9 MN-99999S SERVICE BULLETINS  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								1.1
SIM/TRAINER								
SUPPORT-EQUIP								
SERVICE BLTN		1.0		1.0				18.8
TOTAL COST (BP-1100)		1.0		1.0				19.8

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-92

Contract Date (Month/CY)

Delivery Date (Month/CY)

PE 0401314F Team MOBIL

This Nav/Safety mod installs the terrain Avoidance Warning System (TAWS) utilizing the Enhanced Ground Proximity Warning System (EGPWS), to provide ground warnings, terrain display, and terrain data base look ahead protection, integrating GPS data with a terrain database. FAA mandate to complete TAWS by 2003. The prototype kit installation cost is included in the kit cost IAW contractor practices. This mod is baselined with mod # 6030, Reduced Vertical Navigation System (RVSM).

**Aircraft Breakdown:** Active 23, Reserve 0, ANG 0

N/A

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
<b>RDT&amp;E (3600)</b>												
<b>PROCUREMENT (3010)</b>												
INSTALL KITS			5	0.2	12	0.5	6	0.3				
KITS NONRECUR				0.8		0.7						
EQUIPMENT			[5]	0.5	[12]	1.2	[6]	0.8				
EQUIP NONREC				0.4		0.3						
CHANGE ORDERS												
DATA				0.3		1.0						
SIM/TRAINER												
SUPPORT-EQUIP						0.4						
OGC						0.1		0.1				
<b>INSTALLATION OF HARDWARE</b>												
FY-99					[5]	0.4						
5 KITS												
FY-00					[9]	0.6						
12 KITS												
FY-01							[3]	0.2				
6 KITS							[6]	0.4				
TOTAL INSTALL					14	1.0	9	0.6				
<b>TOTAL COST (BP-1100)</b>												
			5	2.2	12	5.3	6	1.8				
(Totals may not add due to rounding)												

(Totals may not add due to rounding)



(Continued)

UNCLASSIFIED

Fact Sheet: C-9 MN-TAWS TERRAIN AWARENESS & WARNING SYS (TAWS)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					23		23	1.0
KITS NONRECUR								1.5
EQUIPMENT					[23]			2.5
EQUIP NONREC								0.7
CHANGE ORDERS								
DATA								1.3
SIM/TRAINER								0.4
SUPPORT-EQUIP								0.3
OGC								
INSTALLATION OF HARDWARE								
FY-99 5 KITS							[5]	0.4
FY-00 12 KITS							[12]	0.8
FY-01 6 KITS							[6]	0.4
TOTAL INSTALL							23	1.6
TOTAL COST (BP-1100)							23	9.2

(Totals may not add due to rounding)

Method of Implementation: CLS

Initial Lead Time: 9 Months

Follow-On Lead Time: 3 Months

Milestones

	FY-99	FY-00	FY-01
Contract Date (Month/CY)	03/99	12/99	12/00
Delivery Date (Month/CY)	12/99	03/00	03/01

Installation Schedule

	FY-99	FY-00	FY-01
Quarters	1 2 3 4	1 2 3 4	1 2 3 4
Input	3 3 2 4	5 4 2 2	4 2 2 2
Output	2 5 2 4	5 4 2 2	5 2 2 1

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)										DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications				P-1 ITEM NOMENCLATURE: C-17A						
	1999	2000	2001	2002	2003	2004	2005			
COST (In Mil)	\$51.250	\$95.040	\$97.124	\$150.901	\$179.118	\$231.194	\$254.331			

This line item funds modifications to the C-17 aircraft. The four engine C-17 is the only aircraft capable of routine delivery of outsize cargo (tanks, helicopters, etc.) to short, austere airfields. The aircraft can carry up to 102 troops, 36 litter patients, or 18 standard 463-L pallets. The overall goal of the modifications budgeted in FY01 is to improve reliability and maintainability and to correct follow-on operational test & evaluation deficiencies. The primary mods in FY01 are the Global Air Traffic Management and Combustion Exit Temperature Kit. The specific modifications budgeted and programmed are below.

MOD CLASS P-S	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
	99999A	LOW COST SAFETY MO								1.9	3.8
TOTAL FOR CLASS P-S			0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9	3.8
P	0399	AIRLIFT DEFENSIVE SY			2.0	1.1	0.6	0.6	0.8	0.3	5.4
	4660	OPEN SYSTEMS COMM				1.3	9.9	31.3	28.4	6.7	77.6
	5029	AERIAL DELIVERY SYS			0.6	2.1	2.6	1.2			6.5
	6005	TROOP DOOR AFT FAI		0.8	0.2						2.5
	6008	AEROMED LITTER STA	2.7	4.2	3.6	3.8	2.0				21.9
	6015	CONTAINER DELIVERY	1.4								2.9
	6026	400 POUND PARATROO	2.4	1.3	0.7	0.7	3.6	4.2	0.7		18.7
	6042	SURE-COMM	0.3								2.3
	6053	MISSION COMPUTER	2.1								13.9
	6200	AIRCRAFT LIFETIME EX				4.1	39.3	58.7	44.1		146.2
	6201	GPS INTEGRITY MONIT	10.2	13.1	5.3						29.3
	6204	CARGO COMPARTMEN						0.1	7.9	136.4	144.4
	6205	MAINTAINABILITY IMPR							47.2	267.2	314.4
	6206	AVIONICS BLOCK UPG						0.2	10.0	219.8	230.0

Totals may not add due to rounding.

P-1 SHOPP LIST ITEM NO. 38	PAGE NO. 1
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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM NOMENCLATURE: C-17A			
AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications						
	1999	2000	2001	2002	2003	2004
COST (In Mil)	\$51.250	\$95.040	\$97.124	\$150.901	\$179.118	\$231.194
						2005
						\$254.331

This line item funds modifications to the C-17 aircraft. The four engine C-17 is the only aircraft capable of routine delivery of outsize cargo (tanks, helicopters, etc.) to short, austere airfields. The aircraft can carry up to 102 troops, 36 litter patients, or 18 standard 463-L pallets. The overall goal of the modifications budgeted in FY01 is to improve reliability and maintainability and to correct follow-on operational test & evaluation deficiencies. The primary mods in FY01 are the Global Air Traffic Management and Combustion Exit Temperature Kit. The specific modifications budgeted and programmed are below.

CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO.GQ	TOTAL PROG.
6208		CARGO COMPARTMEN					0.7	40.3	68.2	51.0	160.2
7987		ELECTRICAL SYSTEM			3.0						3.0
8332		SIDEWALL LINER/OXYG	1.2	5.3	7.4	7.2	3.9				24.9
8501		CABIN PRESSURIZATIO		2.0	2.1						4.1
8629		LARGE AIRCRAFT INFR				33.1	51.1	48.6	6.2		139.0
9596		LOOSE EQUIPMENT			1.3	3.0	2.5	0.7			7.4
9703		DUAL ROW AIRDROP C	0.4	1.0							1.5
9705		ELECTRONIC FLIGHT C	8.0	6.0	2.3						17.0
9706		SOFTWARE BLOCK UP								6.8	13.7
9707		RM&A MODS				0.1	1.7	8.1	10.4	28.2	48.4
9709		GLOBAL AIR TRAFFIC		4.3	31.5	33.3	9.1				78.2
9709B		AUTOMATED DEPENDE						20.3	10.5	21.4	52.2
9710		BLOCK 12 SOFTWARE			2.2	1.7					3.9
9713		RM&A MODS (FY00)			0.1	1.5	4.1	1.2			6.8
9714		STATION KEEPING FOL			0.1	2.0	4.7				6.8
9715		HF DATA LINK (HFDL)			1.9	4.3	1.4				7.7

Totals may not add due to rounding.

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ITEM NO. 38PAGE NO.  
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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications						P-1 ITEM NOMENCLATURE: C-17A
	1999	2000	2001	2002	2003	2004
						2005
<b>COST (In Mil)</b>	\$51.250	\$95.040	\$97.124	\$150.901	\$179.118	\$231.194
						\$254.331

This line item funds modifications to the C-17 aircraft. The four engine C-17 is the only aircraft capable of routine delivery of outsize cargo (tanks, helicopters, etc.) to short, austere airfields. The aircraft can carry up to 102 troops, 36 litter patients, or 18 standard 463-L pallets. The overall goal of the modifications budgeted in FY01 is to improve reliability and maintainability and to correct follow-on operational test & evaluation deficiencies. The primary mods in FY01 are the Global Air Traffic Management and Combustion Exit Temperature Kit. The specific modifications budgeted and programmed are below.

MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
9716	REQUIRED NAV PERFO			2.0	3.6	1.2				6.8
9717	AIRCREW DATA TRANS		4.3							4.3
9721	ALTERNATE EEC POW		1.1	1.1	1.1	0.4				3.6
9722	SLAT TRACK DOOR BR		1.3	1.3						2.6
9723	FIXED LEADING EDGE		0.2	4.0	4.0	3.2				11.5
9725	SOFTWARE BLOCK 10	0.4	2.2	2.2						4.8
9726	COMBUSTION EXIT TE	20.0	39.5	19.5	30.7	15.4	2.4			127.7
9728	CABIN PRESSURIZATIO	1.1	2.5	1.2						4.7
9729	UNSAT LOCATION ADS					0.1	4.7	13.3	8.4	26.5
9732	COCKPIT REAL ESTAT					0.1	0.4	1.2	0.8	2.4
99999X	LOW COST MODIFICATI		0.1	0.2	0.1	0.1	0.1	0.1	0.3	1.0
SIM-17	Simulator Upgrade					3.2				3.2
TAWS	TERRAIN AWARENESS			1.4	12.2	17.5	5.4			36.5
Z88888	REPROGRAMMINGS	1.1	5.9							7.2
TOTAL FOR CLASS P		51.3	95.0	97.2	151.0	179.3	231.2	252.4	747.4	1,833.6

Totals may not add due to rounding.

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UNCLASSIFIED

## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: C-17A				
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005
	\$51.250	\$95.040	\$97.124	\$150.901	\$179.118	\$231.194	\$254.331

This line item funds modifications to the C-17 aircraft. The four engine C-17 is the only aircraft capable of routine delivery of outsize cargo (tanks, helicopters, etc.) to short, austere airfields. The aircraft can carry up to 102 troops, 36 litter patients, or 18 standard 463-L pallets. The overall goal of the modifications budgeted in FY01 is to improve reliability and maintainability and to correct follow-on operational test & evaluation deficiencies. The primary mods in FY01 are the Global Air Traffic Management and Combustion Exit Temperature Kit. The specific modifications budgeted and programmed are below.

CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO.GQ	TOTAL PROG.
			51.3	95.0	97.2	151.0	179.3	231.2	254.3	749.3	1,837.4
TOTAL FOR AIRCRAFT C-17											

Totals may not add due to rounding.

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UNCLASSIFIED

PE 0401130F Team MOBIL

**Abstract** This modification upgrades the countermeasures package-missile warning system, flare dispenser, and missile diverting flares. This mod is directed by PDB 739 (January 99).

**Aircraft Breakdown:** Active 128, Reserve 0, ANG 6

[illegible]

RDT&amp;E (3600)

**PROCUREMENT (3010)**

## INSTALL KITS

KITS NONREC

## REQUIREMENTS EQUIPMENT

EQUIP NONREC

## CHANGE ORDERS

## CITING DATA

## SIM/TRAINER

## SUPPORT-EQUIP

## INSTALLATION OF HARDWARE

FY-01 50 KITS

FY-02 24 KITS

**FY-03 14 KITS**

FY-03	14 KITS
FY-04	18 KITS

**FY-05 23 KITS**

FY-06 23 KITS  
FY-06 5 KITS

TOTAL INSTALL

TOTAL INSTALL  
TOTAL COST 333,100

**TOTAL COST (BP-1100)**  
(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-0399 AIRLIFT DEFENSIVE SYSTEMS-COUNTERMEASURES

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS	18	0.5	23	0.7	5	0.1	134	4.0
KITS NONRECUR								0.3
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								0.1
DATA								
SIM/TRAINER								0.4
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-01 50 KITS							[50]	0.2
FY-02 24 KITS							[24]	0.1
FY-03 14 KITS	[14]	0.1					[14]	0.1
FY-04 18 KITS			[18]	0.1			[18]	0.1
FY-05 23 KITS					[23]	0.1	[23]	0.1
FY-06 5 KITS					[5]	0.0	[5]	0.0
TOTAL INSTALL	14	0.1	18	0.1	28	0.1	134	0.5
TOTAL COST (BP-1100)	18	0.6	23	0.8	5	0.3	134	5.4
(Totals may not add due to rounding)								

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 12 Months

Follow-On Lead Time: 9 Months

Milestones

	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07
Contract Date (Month/CY)	12/00	12/01	12/02	12/03	12/04	12/05	
Delivery Date (Month/CY)	12/01	09/02	09/03	09/04	09/05	09/06	

Installation Schedule

	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	5 15 15 5	15 15 15 15	6 6 6 6	4 4 4 4	4 4 4 4	6 6 6 6	5 5 5 5
Output	5 15 15 5	15 15 15 15	6 6 6 6	4 4 4 4	4 4 4 4	6 6 6 6	5 5 5 5



UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-6008 AEROMED LITTER STANCHION REDESIGN

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			40	11.5
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
INSTALLATION OF HARDWARE				
FY-98 14 KITS			[14]	1.6
FY-99 11 KITS			[11]	3.0
FY-00 10 KITS			[10]	3.8
FY-01 5 KITS			[5]	2.0
TOTAL INSTALL			40	10.4
TOTAL COST (BP-1100)			40	21.9

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 18 Months

Follow-On Lead Time: 18 Months

Milestones

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)	12/98	12/98	12/99	12/00			
Delivery Date (Month/CY)	06/00	06/00	06/01	06/02			

Installation Schedule

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input				5 10 5 5	5 5 5 5		
Output				5 10 5 5	5 5 5 5		

02/15/2000

FY 2001 PBR

Modification Title and No: CONTAINER DELIVERY SYSTEM ENHANCEMENT (ECVR) MN-6015

Models of Aircraft Affected: C-17

Center: ASC - Wright Patterson AFB, OH

UNCLASSIFIED

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-17 Class P

PE 0401130F Team MOBIL

**Description/Justification**

Increases container delivery capacity from 30 to 40 containers per aircraft. aka Enhanced Container Vertical Restraint (ECVR). Mod is complete.

Aircraft Breakdown: Active 40, Reserve 0, ANG 0

**Development Status**

No RDT&E required.

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONREC

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

INSTALLATION OF HARDWARE

FY-97 1 KITS

FY-98 39 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR QTY	COST	FY-99 QTY	COST	FY-00 QTY	COST	FY-01 QTY	COST	FY-02 QTY	COST	FY-03 QTY	COST
	40	1.5										
	[1]	0.1	[39]	1.4								
	1	0.1	39	1.4								
	40	1.5		1.4								

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-6015 CONTAINER DELIVERY SYSTEM ENHANCEMENT (ECVR)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR							40	1.5
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-97 1 KITS							[1]	0.1
FY-98 39 KITS							[39]	1.4
TOTAL INSTALL							40	1.4
TOTAL COST (BP-1100)							40	2.9

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 18 Months

Follow-On Lead Time: 12 Months

**Milestones**

Contract Date (Month/CY) FY-97 FY-98 FY-99  
03/97 03/98  
Delivery Date (Month/CY) 09/98 03/99

**Installation Schedule**

	FY-97		FY-98		FY-99	
Quarters	1	2	3	4	1	2
Input					1	13
Output					1	13

02/15/2000

FY 2001 PBR

Modification Title and No: 400 POUND PARATROOPER SEAT MN-6026

Models of Aircraft Affected: C-17

Center: ASC - Wright Patterson AFB, OH

PE 0401130F

Team MOBIL

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-17**Description/Justification**

Procedures and installs one set (102 fabric-type) paratrooper seats on each aircraft. These seats support user (Army) requirements, provide safety and support to the occupant and meet the revised C-17 troop seat specifications. Supplier capacity (total of 16 shipsets for production and retrofit) dictates schedule.

Aircraft Breakdown: Active 26, Reserve 0, ANG 0

**Development Status**

RDT&amp;E complete Aug 1996.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KIT'S NONREC	8	4.9	3	1.9	1	0.6	1	0.6	1	0.6	6	3.5
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
INSTALLATION OF HARDWARE												
FY-97 1 KITS	[1]	0.1										
FY-98 7 KITS			[4]	0.4	[3]	0.4						
FY-99 3 KITS					[3]	0.4						
FY-00 1 KITS							[1]	0.1				
FY-01 1 KITS									[1]	0.1	[1]	0.1
FY-02 1 KITS												
FY-03 6 KITS												
FY-04 6 KITS												
TOTAL INSTALL	1	0.1	4	0.4	6	0.7	1	0.1	1	0.1	1	0.1
TOTAL COST (BP-1100)	8	5.0	3	2.4	1	1.3	1	0.7	1	0.7	6	3.6

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-6026 400 POUND PARATROOPER SEAT

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR	6	3.5		26
EQUIPMENT				15.6
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
INSTALLATION OF HARDWARE				
FY-97	1			[1]
FY-98	7			[7]
FY-99	3			[3]
FY-00	1			[1]
FY-01	1			[1]
FY-02	1			[1]
FY-03	1			[1]
FY-04	6	0.7		[6]
FY-05	6	0.7		[6]
TOTAL INSTALL	6	0.7	0.7	26
TOTAL COST (BP-1100)	6	4.2	0.7	26
TOTAL COST (BP-1100)	6	4.2	0.7	18.7
(Totals may not add due to rounding)				

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

#### Milestones

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
Contract Date (Month/CY)	09/97	03/98	12/98	12/99	12/00	12/01	12/02	12/03	12/04
Delivery Date (Month/CY)	09/98	03/99	12/99	12/00	12/01	12/02	12/03	12/04	12/05

#### Installation Schedule

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Quarters	1	2	3	4	1	2	3	4
Input	1	1	2	2	1	2	2	1
Output	1	1	2	2	1	2	2	1
FY-05								
Quarters	1	2	3	4				
Input	1	2	2	1				
Output	1	2	2	1				

02/15/2000

FY 2001 PBR

Modification Title and No: MISSION COMPUTER MN-6053

Models of Aircraft Affected: C-17

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-17

PE 0401130F Team MOBIL

**Description/Justification**

The mission computer upgrade is a producibility enhancement which also corrects operational deficiencies in the current design and provides a long term solution for future growth requirements. aka Core Integrated Processor (CIP). Mod is complete.

Aircraft Breakdown: Active 40, Reserve 0, ANG 0

**Development Status**

None. No RDT&E required.

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

INSTALLATION OF HARDWARE

FY-97 40 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	[1]	0.1	[39]	2.1								
	1	0.1	39	2.1								
	40	11.7										

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-6053 MISSION COMPUTER  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR			40	11.7
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
INSTALLATION OF HARDWARE				
FY-97 40 KITS			[40]	2.2
TOTAL INSTALL			40	2.2
TOTAL COST (BP-1100)			40	13.9

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 18 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-97 FY-98 FY-99  
Contract Date (Month/CY) 03/97  
Delivery Date (Month/CY) 09/98

**Installation Schedule**

	FY-97	FY-98	FY-99
Quarters	1 2 3 4	1 2 3 4	1 2 3 4
Input		1 9 10 10	1 9 10 10
Output		1 9 10 10	1 9 10 10



PE 0401130F Team MOBIL

(Totals may not add due to rounding)

UNCLASSIFIED

Fact Sheet: C-17 MN-6201 GPS INTEGRITY MONITORING CAPABILITY IMPROVEMENTS

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR					48	16.2		
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
GFP								2.0
INSTALLATION OF HARDWARE								
FY-98 1 KITS							[1]	0.2
FY-99 24 KITS							[24]	5.5
FY-00 23 KITS							[23]	5.3
TOTAL INSTALL							48	11.1
TOTAL COST (BP-1100)							48	29.3

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 18 Months

Follow-On Lead Time: 12 Months

Milestones

	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	03/98	03/99	12/99	
Delivery Date (Month/CY)	09/99	03/00	12/00	

Installation Schedule

	FY-98		FY-99		FY-00		FY-01	
Quarters	1	2	3	4	1	2	3	4
Input				4	1	2	3	
Output				1	12	12	4	12
					12	12	4	12
								7

02/15/2000

FY 2001 PBR

Modification Title and No: ELECTRICAL SYSTEM CONTROL PANEL REDESIGN MN-7987

Models of Aircraft Affected: C-17

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-17

PE 0401130F Team MOBIL

**Description/Justification**

This modification is to redesign the electrical system control panel to correct a single point failure deficiency.

Aircraft Breakdown: Active 70, Reserve 0, ANG 0

**Development Status**

Design complete 9/00.

**Projected Financial Plan**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)						
PROCUREMENT (3010)						
INSTALL KITS				70		3.0
KITS NONRECUR						
EQUIPMENT						
EQUIP NONREC						
CHANGE ORDERS						
DATA						
SIM/TRAINER						
SUPPORT-EQUIP						
TOTAL COST (BP-1100)				70		3.0

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-7987 ELECTRICAL SYSTEM CONTROL PANEL REDESIGN

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					70		70	3.0
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
TOTAL COST (BP-1100)					70	3.0		

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 9 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-01  
Contract Date (Month/CY) 12/00  
Delivery Date (Month/CY) 09/01

PE 0401130F Team MOBIL

## (Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-8332 SIDEWALL LINER/OXYGEN BOX RELOCATION  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					32	3.8		
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-99 10 KITS							[10]	5.4
FY-00 13 KITS							[13]	8.7
FY-01 9 KITS							[9]	7.1
TOTAL INSTALL							32	21.2
TOTAL COST (BP-1100)							32	24.9

(Totals may not add due to rounding)

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 18 Months

Follow-On Lead Time: 18 Months

Milestones

	FY-98	FY-99	FY-99	FY-99	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)	12/98	12/99	12/99	12/00	12/00			
Delivery Date (Month/CY)	06/00	06/01	06/01	06/02				

Installation Schedule

	FY-98	FY-99	FY-99	FY-99	FY-00	FY-01	FY-02	FY-03
Quarters	1	2	3	4	1	2	3	4
Input					3	4	3	2
Output					3	4	3	2

02/15/2000

FY 2001 PBR

Modification Title and No: CABIN PRESSURIZATION/EGRESS-PHASE II MN-8501

Models of Aircraft Affected:

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-17

PE 0401130F Team MOBIL

**Description/Justification**

This is not a New Start. Previously part of MN-9728 and broken out separately due to kitproofing results indicating part of effort more difficult than expected. To optimize operational use of A/C during modification, two A/C availability schedules were developed, one for simpler part of mod (Phase I) and another for more difficult part (Phase II). This mod is for the more difficult part. Scope of the total effort remains the same. The 9 additional A/C on this mod is due to the simpler part being installed during production on those 9. This modification is to redesign the Cabin Pressurization system to enhance current capability and provide safer, more efficient operation; allowing normal and emergency egress to take place with reduced risk of hazard to personnel or aircraft. Changes will be made to the Cabin Pressure Controller (CPC)/Operational Flight Program software logic, and improving flight deck gauges and controls.

Aircraft Breakdown: Active 57, Reserve 0, ANG 0

**Development Status**

Design complete 1/99.

**Projected Financial Plan**

RD&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

INSTALLATION OF HARDWARE

FY-00 30 KITS

FY-01 27 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
				30	1.5	27	1.3				
				[24]	0.6	[6]	0.1				
						[27]	0.6				
				24	0.6	33	0.8				
				30	2.0	27	2.1				

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-8501 CABIN PRESSURIZATION/EGRESS-PHASE II

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RD&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					57		57	2.8
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-00 30 KITS							[30]	0.7
FY-01 27 KITS							[27]	0.6
TOTAL INSTALL							57	1.4
TOTAL COST (BP-1100)							57	4.1

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 3 Months

Follow-On Lead Time: 3 Months

#### Milestones

	FY-00	FY-01
Contract Date (Month/CY)	12/99	12/00
Delivery Date (Month/CY)	03/00	03/01

#### Installation Schedule

	FY-00				FY-01			
Quarters	1	2	3	4	1	2	3	4
Input		12	12	6	4	12	11	
Output		12	12	6	4	12	11	



**Models of Aircraft Affected:**

UNCLASSIFIED

## MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-17 Class P

PE 0401130F Team MOBIL

**Description/Justification**

**2008-2009** This is not a New Start. Previously part of MN-6208, This modification improves the On Board Loose Equipment (OBLE) configuration that provides storage capability for ramp toe wedges, improves the design of the comfort pallet support clamps, the cargo door stowage bin covers, and improves storage/access to specified items on the OBLE list.

**Aircraft Breakdown:** Active 85, Reserve 0, ANG 0

### Development Status

**Development complete 3/00.**

### **Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS							22	1.3		2.3	23	1.3
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
INSTALLATION OF HARDWARE												
FY-01 22 KITS									[22]	0.6	[40]	1.2
FY-02 40 KITS												
FY-03 23 KITS												
TOTAL INSTALL												
TOTAL COST (BP-1100)							22	1.3		2.3	23	2.5
(Totals may not add due to rounding)												

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-9596 LOOSE EQUIPMENT  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)							85	4.9
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-01 22 KITS							[22]	0.6
FY-02 40 KITS							[40]	1.2
FY-03 23 KITS	[23]	0.7					[23]	0.7
TOTAL INSTALL	23	0.7					85	2.5
TOTAL COST (BP-1100)		0.7					85	7.4

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 12 Months

Follow-On Lead Time: 9 Months

Milestones

	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)	12/00	12/01	12/02	
Delivery Date (Month/CY)	12/01	09/02	09/03	

Installation Schedule

	FY-01		FY-02		FY-03		FY-04	
Quarters	1	2	3	4	1	2	3	4
Input			7	7	8	10	10	8
Output			7	7	8	10	10	8

02/15/2000

FY 2001 PBR

Modification Title and No: DUAL ROW AIRDROP CAPABILITY MN-9703

Models of Aircraft Affected: C-17

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-17

Center: ASC - Wright Patterson AFB, OH

PE 0401130F Team MOBIL

**Description/Justification**

The objective of this project is to increase the volumetric capacity of the C-17's airdrop capability. Mod will allow use of C-17 logistics rails for performance of gravity cargo airdrop. This resolves strategic brigade airdrop shortfall sooner and at less cost than modifying C-5 aircraft.

Aircraft Breakdown: Active 48, Reserve 0, ANG 0

**Development Status**

Hardware design is complete.

**Projected Financial Plan**

RDT&E (3600)

**PROCUREMENT (3010)**

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

**INSTALLATION OF HARDWARE**

FY-98 1 KITS

FY-99 28 KITS

FY-00 19 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
1	0.1	28	0.4	19	0.3							
[1]		0.0										
[28]		0.4										
[19]		0.3										
1	0.0	47	0.7									
1	0.1	28	0.4	19	1.0							

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-9703 DUAL ROW AIRDROP CAPABILITY

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	QTY
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
INSTALLATION OF HARDWARE				
FY-98 1 KITS				
FY-99 28 KITS				
FY-00 19 KITS				
TOTAL INSTALL				
TOTAL COST (BP-1100)				

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 18 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-98	FY-99	FY-00
Contract Date (Month/CY)	01/98	12/98	12/99
Delivery Date (Month/CY)	08/99	09/99	06/00

**Installation Schedule**

	FY-98	FY-99	FY-00
Quarters	1 2 3 4	1 2 3 4	1 2 3 4
Input			
Output			

02/15/2000

FY 2001 PBR

Modification Title and No: ELECTRONIC FLIGHT CONTROL SYSTEM (EFCS) MN-9705

Models of Aircraft Affected: C-17

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-17

PE 0401130F Team MOBIL

#### Description/Justification

The current C-17 Electronic Flight Control System (EFCS), Flight Control Computer (FCC), and Spoiler Control/Electronic Flap Computer (SCEFC) employ 20 MHz Pace 1750A Central Processor Units (CPUs). The current FCC and SCEFC have nearly reached their maximum throughput capacity and memory capacity leaving no room for additional functionality. This performance improvement project will provide higher spare throughput and increased spare memory required to accommodate future expansion for the Block 10 software upgrade and beyond. The project will replace the current Shop Replaceable Units (SRUs) using 20 MHz Pace 1750A processors with new SRUs containing 40 MHz Pace 1750AE processors. Also the memory on the new SRUs will be increased from 128K words to 1Meg words. This modification is baselined with MN-6201 GPS Integrity Monitoring Capability Improvements and MN-9725 Block 10 Software.

Aircraft Breakdown: Active 48, Reserve 0, ANG 0

#### Development Status

Hardware and software design complete 3/98.

#### Projected Financial Plan

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR	1	0.3	24	5.6	23	3.8						
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
MOD OF SPARES												
FY86/87 QTY	[12]	0.5	[75]	2.3	[63]	1.0						
INSTALLATION OF HARDWARE												
FY-98 1 KITS			[1]	0.1								
FY-99 24 KITS					[24]	1.2	[23]	2.3				
FY-00 23 KITS												
TOTAL INSTALL			1	0.1	24	1.2	23	2.3				
TOTAL COST (BP-1100)	1	0.8	24	8.0	23	6.0						
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-9705 ELECTRONIC FLIGHT CONTROL SYSTEM (EFCS)  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR			48	9.8
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
MOD OF SPARES				
FY86/87 QTY			[150]	3.7
INSTALLATION OF HARDWARE				
FY-98			[1]	0.1
1 KITS				
FY-99			[24]	1.2
24 KITS				
FY-00			[23]	2.3
23 KITS				
TOTAL INSTALL			48	3.6
TOTAL COST (BP-1100)			48	17.0

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 12 Months

Follow-On Lead Time: 9 Months

**Milestones**

	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	06/98	12/98	12/99	
Delivery Date (Month/CY)	06/99	09/99	09/00	

**Installation Schedule**

	FY-98	FY-99	FY-00	FY-01
Quarters	1	2	3	4
Input	1	6	6	6
Output	1	6	6	6

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: GLOBAL AIR TRAFFIC MANAGEMENT (GATM) MN-9709  
 Models of Aircraft Affected: C-17  
 Center: ASC - Wright Patterson AFB, OH  
 PE 0401130F Team MOBIL  
 Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: C-17

**Description/Justification**  
 This mod is required by International Civil Aviation Organizations and the Federal Aviation Administration. This GATM (Communications/Surveillance)/Nav Safety modification provides the INMARSAT Aero-I, Traffic Alert and Collision Avoidance System (TCAS-II)-IFF Mode S; Controller-Pilot Datalink Communications (CPDLC) and Automatic Dependence Surveillance (ADS) automated messaging capabilities.

Aircraft Breakdown: Active 70, Reserve 0, ANG 0

**Development Status**  
 Currently on contract for development effort. Design completed Jul 99.

**Projected Financial Plan**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)						
PROCUREMENT (3010)						
INSTALL KITS			4	2.9	41	30.0
KITS NONRECUR				1.4		
EQUIPMENT					25	18.3
EQUIP NONREC						
CHANGE ORDERS						
DATA						
SIM/TRAINER						
SUPPORT-EQUIP						
INSTALLATION OF HARDWARE						
FY-00 4 KITS				1.5	[41]	15.0
FY-01 41 KITS						
FY-02 25 KITS						
TOTAL INSTALL				4	1.5	41
					25	33.3
TOTAL COST (BP-1100)			4	4.3	41	9.1

(Totals may not add due to rounding)

UNCLASSIFIED

Fact Sheet: C-17 MN-9709 GLOBAL AIR TRAFFIC MANAGEMENT (GATM)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					70	51.2		
KITS NONRECUR						1.4		
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-00 4 KITS							[4]	1.5
FY-01 41 KITS							[41]	15.0
FY-02 25 KITS							[25]	9.1
TOTAL INSTALL					70	25.6		
TOTAL COST (BP-1100)					70	78.2		

(Totals may not add due to rounding)

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 9 Months

Follow-On Lead Time: 9 Months

Milestones

	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)	03/00	12/00	12/01	
Delivery Date (Month/CY)	12/00	09/01	09/02	

Installation Schedule

	FY-00		FY-01		FY-02		FY-03	
Quarters	1	2	3	4	1	2	3	4
Input		2	2		11	10	10	5
Output			3	1	6	10	10	5



02/15/2000

FY 2001 PBR

Modification Title and No: BLOCK 12 SOFTWARE MN-9710

Models of Aircraft Affected: C-17

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-17

Center: ASC - Wright Patterson AFB, OH

PE 0401130F Team MOBIL

**Description/Justification**

Updates the software to the aircraft Block 12 configuration. Will include PICRs for over 60 items including: Loose Platform Detection capability & CAWS update; obstacle clearance computations; SIDS clearance capability; SKE enhancements for Block 12; Air Refueling performance data; Engine out LRC speed; Max thrust in climb; MLS final approach capability to 5 Degrees/1000 FPM glidepath. Mod number changed from \_HXCLEN to 9710. This mod is baselined with GATM (MN-9709)

Aircraft Breakdown: Active 70, Reserve 0, ANG 0

**Development Status**

Development to complete 2/00.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
SOFTWARE												
SPARES												
							[41]	1.9		[25]		1.1
								0.4				0.5
								2.2				1.7
TOTAL COST (BP-1100)												

(Totals may not add due to rounding)

UNCLASSIFIED

Fact Sheet: C-17 MN-9710 BLOCK 12 SOFTWARE  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
SOFTWARE								
SPARES								
TOTAL COST (BP-1100)								
(Totals may not add due to rounding)								
Method of Implementation: CONTRACTOR FACILITY								
Initial Lead Time: 1 Month								
Follow-On Lead Time: 1 Month								

Milestones

	FY-00	FY-01	FY-02
Contract Date (Month/CY)	12/00	12/01	12/01
Delivery Date (Month/CY)	01/01	01/01	01/02

Installation Schedule

	FY-00		FY-01		FY-02	
Quarters	1	2	3	4	1	2
Input						
Output						

02/15/2000

FY 2001 PBR

Modification Title and No: HF DATA LINK (HFDL) MN-9715

Models of Aircraft Affected: C-17

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-17

PE 0401130F Team MOBIL

**Description/Justification**

This modification is required by International Civil Aviation Organizations and the Federal Aviation Administration. This GATM (Communication) modification adds high frequency data link (HFDL) for automated ATC messaging. Mod number changed from \_N4LTZ to 9715. This effort being accomplished simultaneously with Required Navigation Performance -4 (RNP-4), Mod number 9716.

Aircraft Breakdown: Active 85, Reserve 0, ANG 0

**Development Status**

Scheduled completion 1/01.

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

INSTALLATION OF HARDWARE

FY-01 29 KITS

FY-02 56 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
QTY	COST	QTY	COST	QTY	COST

29	1.9	56	3.6		
----	-----	----	-----	--	--

[29]	0.7				
------	-----	--	--	--	--

[56]	56	1.4			
------	----	-----	--	--	--

29	0.7	56	1.4		
----	-----	----	-----	--	--

29	1.9	56	4.3		
----	-----	----	-----	--	--

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-9715 HF DATA LINK (HFDL)  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							85	5.5
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-01 29 KITS							[29]	0.7
FY-02 56 KITS							[56]	1.4
TOTAL INSTALL							85	2.1
TOTAL COST (BP-1100)							85	7.7

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 12 Months

Follow-On Lead Time: 9 Months

**Milestones**

	FY-01	FY-02	FY-03
Contract Date (Month/CY)	12/00	12/01	
Delivery Date (Month/CY)	12/01	09/02	

**Installation Schedule**

	FY-01			FY-02			FY-03		
Quarters	1	2	3	4	1	2	3	4	
Input					9	10	14	14	14
Output					9	10	14	14	14

PE 0401130F Team MOBIL

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-9716 REQUIRED NAV PERFORMANCE RNP-4  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					85			4.6
KITS NONRECUR								0.4
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
SOFTWARE								
SOFTWARE NONREC								
INSTALLATION OF HARDWARE								
FY-01 29 KITS							[29]	0.6
FY-02 56 KITS							[56]	1.2
TOTAL INSTALL							85	1.8
TOTAL COST (BP-1100)							85	6.8

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 12 Months

Follow-On Lead Time: 9 Months

#### Milestones

	FY-01	FY-02	FY-03
Contract Date (Month/CY)	12/00	12/01	
Delivery Date (Month/CY)	12/01	09/02	

#### Installation Schedule

	FY-01			FY-02			FY-03		
Quarters	1	2	3	4	1	2	3	4	
Input					9	10	14	14	14
Output					9	10	14	14	14

02/15/2000

FY 2001 PBR

Modification Title and No: AIRCREW DATA TRANSFER DEVICE MN-9717

Models of Aircraft Affected: C-17

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-17

PE 0401130F Team MOBIL

**Description/Justification**

Pentium upgrade for P-57 and prior due to obsolescence and supportability issues. Military unique portable computer. Includes embedded 1553 data card, multiple data transfer device capability, open architecture software, ruggedized and tested to meet Aircraft specifications. Formerly known as Loadmaster Portable Maintenance Aid. Mod number changed from \_O2FXG to 9717.

Aircraft Breakdown: Active 57, Reserve 0, ANG 0

**Development Status**

None, obsolescence upgrade.

**Projected Financial Plan**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)						
PROCUREMENT (3010)						
INSTALL KITS						
KITS NONRECUR						
EQUIPMENT			57	4.3		
EQUIP NONREC						
CHANGE ORDERS						
DATA						
SIM/TRAINER						
SUPPORT-EQUIP						
TOTAL COST (BP-1100)			57	4.3		

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-9717 AIRCREW DATA TRANSFER DEVICE  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KIT'S NONREC				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
TOTAL COST (BP-1100)			57	4.3
(Totals may not add due to rounding)				

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 6 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-00  
Contract Date (Month/CY) 12/99  
Delivery Date (Month/CY) 06/00



02/15/2000

FY 2001 PBR

Modification Title and No: ALTERNATE EEC POWER MN-9721

Models of Aircraft Affected: C-17

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-17

Center: ASC - Wright Patterson AFB, OH

PE 0401130F Team MOBIL

**Description/Justification**

This mod is designed to provide alternate/backup power to the Electronic Engine Control (EEC) to prevent engine shutdown in flight. This will provide 28VDC Aircraft Power through the Fuel Switch. Mod number changed from \_QFP61 to 9721.

Aircraft Breakdown: Active 70, Reserve 0, ANG 0

**Development Status**

Development complete 4/99.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)					31	1.1	20	0.7	19	0.7		
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
INSTALLATION OF HARDWARE												
FY-00 31 KITS							[23]	0.4	[8]	0.1		
FY-01 20 KITS									[18]	0.3	[2]	0.0
FY-02 19 KITS											[19]	0.3
TOTAL INSTALL							23	0.4	26	0.4	21	0.4
TOTAL COST (BP-1100)					31	1.1	20	1.1	19	1.1		0.4

(Totals may not add due to rounding)

UNCLASSIFIED

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			70	2.4
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
INSTALLATION OF HARDWARE				
FY-00 31 KITS				
FY-01 20 KITS				
FY-02 19 KITS				
TOTAL INSTALL			70	1.2
TOTAL COST (BP-1100)			70	3.6

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 12 Months Follow-On Lead Time: 12 Months

**Milestones**

	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)	12/99	12/00	12/01	12/02
Delivery Date (Month/CY)	12/00	12/01	12/02	

**Installation Schedule**

	FY-00	FY-01	FY-02	FY-03
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	4 9 9 9	4 9 9 9	4 9 9 9	4 9 9 9
Output	4 9 9 9	4 9 9 9	4 9 9 9	4 9 9 9



(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-9722 SLAT TRACK DOOR BRACKETS

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RD&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					32	1.7		
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-00 24 KITS							[24]	0.7
FY-01 8 KITS							[8]	0.2
TOTAL INSTALL							32	0.9
TOTAL COST (BP-1100)							32	2.6

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 6 Months

Follow-On Lead Time: 3 Months

**Milestones**

	FY-00	FY-01
Contract Date (Month/CY)	12/99	12/00
Delivery Date (Month/CY)	06/00	03/01

**Installation Schedule**

	FY-00			FY-01		
Quarters	1	2	3	4	1	2
Input					1	4
Output					1	4

PE 0401130F Team MOBIL

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-9723 FIXED LEADING EDGE FORMER CRACKS  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					57		57	2.6
KIT'S NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-00	1	KITS					[1]	0.2
FY-01	20	KITS					[20]	3.1
FY-02	20	KITS					[20]	3.1
FY-03	16	KITS					[16]	2.5
TOTAL INSTALL							57	8.8
TOTAL COST (BP-1100)							57	11.5
(Totals may not add due to rounding)								

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 6 Months

Follow-On Lead Time: 3 Months

Milestones

	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)	12/99	12/00	12/01	12/02
Delivery Date (Month/CY)	06/00	03/01	03/02	03/03

Installation Schedule

	FY-00		FY-01		FY-02		FY-03	
Quarters	1	2	3	4	1	2	3	4
Input		1	6	7	6	7	5	5
Output		1	6	7	6	7	5	5

02/15/2000

FY 2001 PBR

Modification Title and No: SOFTWARE BLOCK 10 UPGRADE MN-9725

Models of Aircraft Affected: C-17

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-17

PE 0401130F Team MOBIL

**Description/Justification**

Upgrade fielded aircraft with Block 10 software, including upgrade of spares. Will include Product Improvement Change Requests (PICRs) for Engine Out Compensation System wet runway takeoff performance; Semi-prepared and matted runway performance; Worldwide navigation capability; Manifold Failure Detection Controller fault erase capability; Environmental Control System controller Built In Test; Maintenance improvements. Done concurrently with Electronic Flight Control System (MN 9705) and Global Positioning System Integrity Monitoring (MN 6201). Mod changed from \_WAPJ4 to 9725.

Aircraft Breakdown: Active 48, Reserve 0, ANG 0

**Development Status**

Development complete 1/99.

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

SOFTWARE

SPARES

PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
		[1]	0.2	[24]	1.6	[23]	1.5				
			0.1		0.7		0.7				
			0.4		2.2		2.2				

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-9725 SOFTWARE BLOCK 10 UPGRADE  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
SOFTWARE								
SPARES								
TOTAL COST (BP-1100)								
(Totals may not add due to rounding)								

[48] 3.3  
1.5  
4.8

Method of Implementation: CONTRACTOR FACILITY  
Initial Lead Time: 9 Months

Follow-On Lead Time: 0 Months

**Milestones**

	FY-99	FY-00	FY-01
Contract Date (Month/CY)	12/98	12/99	12/00
Delivery Date (Month/CY)	09/99	12/99	12/00

**Installation Schedule**

	FY-99		FY-00		FY-01	
Quarters	1	2	3	4	1	2
Input						
Output						



02/15/2000

FY 2001 PBR

Modification Title and No: COMBUSTION EXIT TEMPERATURE KIT - D01 TO D03 UPGR MN-9726

Models of Aircraft Affected: C-17

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-17

PE 0401130F Team MOBIL

**Description/Justification**

Upgrade of F117 engines from DO1 configuration to DO3 configuration. Will lead to reduction in engine gas temperature margin reduction, increase time on wing while reducing unexpected shop visit rate. Mod number changed from \_WOLUW to 9726.

Aircraft Breakdown: Active 100, Reserve 0, ANG 0

**Development Status**

Commercial development is complete, no unique USAF requirement.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	20	20.0	34	34.0	11	11.0	27	27.0	8	8.0		
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
INSTALLATION OF HARDWARE												
FY-99 20 KITS			[20]	5.5								
FY-00 34 KITS					[31]	8.5			[3]	0.8		
FY-01 11 KITS									[11]	2.9		
FY-02 27 KITS											[27]	7.4
FY-03 8 KITS												
TOTAL INSTALL			20	5.5	31	8.5	14	3.7	27	7.4		
TOTAL COST (BP-1100)	20	20.0	34	39.5	11	19.5	27	30.7	8	15.4		

(Totals may not add due to rounding)

UNCLASSIFIED

(Continued)

Fact Sheet: C-17 MN-9726 COMBUSTION EXIT TEMPERATURE KIT - D01 TO D03 UPR

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)							100	100.0
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-99 20 KITS							[20]	5.5
FY-00 34 KITS							[34]	9.4
FY-01 11 KITS							[11]	2.9
FY-02 27 KITS							[27]	7.4
FY-03 8 KITS							[8]	2.4
TOTAL INSTALL	8	2.4					100	27.7
TOTAL COST (BP-1100)		2.4					100	127.7

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 12 Months Follow-On Lead Time: 12 Months

**Milestones**

	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)	12/98	12/99	12/00	12/01	12/02	12/03
Delivery Date (Month/CY)	12/99	12/00	12/01	12/02	12/03	

**Installation Schedule**

	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Quarters 1	2	3	4	1	2	3
Input	2	6	6	4	9	2
Output	2	6	6	4	9	2



(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-9728 CABIN PRESSURIZATION/EGRESS  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	QTY
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			48	1.7
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
CONT LIABILITY				0.5
INSTALLATION OF HARDWARE				
FY-99 25 KITS			[25]	1.3
FY-00 23 KITS			[23]	1.2
TOTAL INSTALL			48	2.5
TOTAL COST (BP-1100)			48	4.7

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

**Milestones**

FY-99	FY-00	FY-01
Contract Date (Month/CY)	02/99	12/99
Delivery Date (Month/CY)	08/99	06/00

**Installation Schedule**

	FY-99	FY-00	FY-01
Quarters	1 2 3	4 1 2 3	4 1 2 3
Input	1 6 6	6 6 6	6 6 6
Output	1 6 6	6 6 6	6 6 6

02/15/2000

FY 2001 PBR

Modification Title and No: TERRAIN AWARENESS & WARNING SYS (TAWS) MN-TAWS

Models of Aircraft Affected: C-17

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-17

Center: ASC - Wright Patterson AFB, OH

PE 0401130F Team MOBIL

**Description/Justification**

This GATM Navigation safety mod will satisfy ground proximity warning system requirements. This project also includes Reactive Windshear Detection.

Aircraft Breakdown: Active 85, Reserve 0, ANG 0

**Development Status**

Design to complete 4/00.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR					1	0.3			42	12.1	42	12.1
EQUIPMENT						1.1						
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
INSTALLATION OF HARDWARE												
FY-01 1 KITS									[1]	0.1		
FY-02 42 KITS											[42]	5.4
FY-03 42 KITS												
TOTAL INSTALL									1	0.1	42	5.4
TOTAL COST (BP-1100)					1	1.4			42	12.2	42	17.5

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-17 MN-TAWS TERRAIN AWARENESS & WARNING SYS (TAWS)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)							85	24.5
INSTALL KITS								1.1
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-01 1 KITS							[1]	0.1
FY-02 42 KITS							[42]	5.4
FY-03 42 KITS	[42]	5.4					[42]	5.4
TOTAL INSTALL	42	5.4					85	11.0
TOTAL COST (BP-1100)		5.4					85	36.5

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 18 Months

Follow-On Lead Time: 12 Months

Milestones

	FY-01	FY-02	FY-03	FY-04	FY-05
Contract Date (Month/CY)	12/00	12/01	12/02		
Delivery Date (Month/CY)	06/02	12/02	12/03		

Installation Schedule

	FY-01			FY-02			FY-03			FY-04			FY-05		
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
Input						1			10	10	11	11	10	10	10
Output						1			10	10	11	11	10	10	10

## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: C-21			
	1999	2000	2001	2002	2003	2004
						2005
<b>COST (In Mil)</b>	\$47.226	\$9.347	\$1.883	\$2.653	\$2.579	\$1.459
						\$1.523

This line item funds modifications to the C-21 aircraft, commercial equivalent Lear Jet 35. The C-21 aircraft is a twin-turboprop engine aircraft used for cargo and passenger airlift over medium ranges (2,000 miles). The primary modifications budgeted in FY01 are the Traffic Alert & Collision Avoidance System (TCAS) and the Terrain Awareness and Warning System (TAWS). Other modifications are budgeted to fund service bulletins necessary for FAA certification and to enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

CLASS P	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
	3149T	TRAFFIC ALERT & COL	18.5	5.5	1.1						30.5
	9702	8.33 KHZ VHF RADIO	6.5								6.5
	9999S	SERVICE BULLETINS	0.1	0.1	0.1	2.7	2.6	1.5	1.5		11.4
	DC101	FM IMMUNITY	1.6								1.6
	TAWS	TERRAIN AWARENESS	15.4	3.2	0.7						19.3
	Z88888	REPROGRAMMINGS	5.2	0.6							6.3
TOTAL FOR CLASS P			47.2	9.4	1.9	2.7	2.6	1.5	1.5	0.0	75.4
TOTAL FOR AIRCRAFT C-21			47.2	9.4	1.9	2.7	2.6	1.5	1.5	0.0	75.4

Totals may not add due to rounding.

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02/15/2000

FY 2001 PBR

Modification Title and No: TRAFFIC ALERT &amp; COLLISION AVOIDANCE SYSTEM MN-3149T

Models of Aircraft Affected: C-21A

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-21 Class P

PE 0401314F Team MOBIL

**Description/Justification**

The navigation and safety upgrade program combines the C-21A Nav/Safety upgrades on Air Force aircraft designated for DV passenger missions. The Traffic Alert and Collision Avoidance System (TCAS) will provide a display for inbound aircraft traffic and provides both visual display, corrective action, and audible warning. The modification is IAW SECDEF 26 Apr 96 letter requiring navigation and safety upgrades for the 89th Airlift Wing, Distinguished Visitor (DV) and Operational Support Airlift (OSA) airlift. This mod was previously funded in P3 3149T, later moved to 9709C-GATM/New Generation Cockpit and now is being shown in this P3. This modification ties in with TAWS 0874 that will be installed concurrently. Projected Contract 7/30/99, Prototype 9/15/99, Installation Start 03/15/00 Installation Complete 3/30/01. In FY98, TCAS II Ver 6.04 was prototyped and kitproofed on two a/c. These will be updated to Ver 7 by contractor.

Aircraft Breakdown: Active 76, Reserve 0, ANG 2

**Development Status**

N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	[18]	1.3	[56]	5.8								
KITS NONRECUR												
EQUIPMENT	18	2.4	56	7.7								
EQUIP NONREC	4	1.4		0.0								
CHANGE ORDERS						0.3						
DATA		0.1		0.1		0.4						
SIM/TRAINER					[1]	0.8						
SUPPORT-EQUIP												
TRAINING				0.4								
TESTING		0.2										
FLIGHT TEST		0.0	[38]	0.1	[29]	0.1						
OGC		0.0		0.0		0.4		0.2				
INSTALLATION OF HARDWARE												
FY-97 3 KITS	[2]		[1]									
FY-98 19 KITS			[19]	2.1								
FY-99 56 KITS			[20]	2.3	[29]	3.5	[7]	0.8				
TOTAL INSTALL	2		40	4.3	29	3.5	7	0.8				
TOTAL COST (BP-1100)	22	5.4	56	18.5		5.5		1.1				

(Totals may not add due to rounding)

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UNCLASSIFIED



UNCLASSIFIED

Fact Sheet: C-21 MN-3149T TRAFFIC ALERT & COLLISION AVOIDANCE SYSTEM

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					[74]	7.1		
KITS NONRECUR								
EQUIPMENT					74	10.0		
EQUIP NONREC					4	1.5		
CHANGE ORDERS						0.3		
DATA						0.7		
SIM/TRAINER					[1]	0.8		
SUPPORT-EQUIP								
TRAINING						0.4		
TESTING						0.2		
FLIGHT TEST					[67]	0.1		
OGC						0.7		
INSTALLATION OF HARDWARE								
FY-97 3 KITS					[3]			
FY-98 19 KITS					[19]	2.1		
FY-99 56 KITS					[56]	6.6		
TOTAL INSTALL					78	8.7		
TOTAL COST (BP-1100)					78	30.5		

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 2 Months

Follow-On Lead Time: 3 Months

Milestones

	FY-97	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	04/98	12/99	12/99	10/00	10/00
Delivery Date (Month/CY)	06/98	03/00	03/00	01/01	

Installation Schedule

	FY-97	FY-98	FY-99	FY-00	FY-01
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input		2	2	18	18
Output		2	2	18	18

02/15/2000

FY 2001 PBR

Modification Title and No: 8.33 KHZ VHF RADIO MN-9702

Models of Aircraft Affected: C-21A

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-21

PE 0401314F Team MOBIL

**Description/Justification**

Effective 7 OCT 99, 8.33kHz channel spacing capable radio equipment will be required to fly in European airspace without flight processing delays, re-routing, and flight at lower altitudes. Non-equipped aircraft will not be allowed to enter the airspace for which 8.33kHz channel spacing capable radio equipment has been declared mandatory. Funding for this action was previously addressed in P3 9709C-GA TM/New Generation Cockpit. Equipment pricing reflects contractor's practice of Group A and B costs totaled into one price. This modification ties into Protected ILS MOD 6445. Projected Contract Date 6/30/99, Prototype 7/30/99, Installation starts 8/30/99, Installation completed 9/30/00.

Aircraft Breakdown: Active 76, Reserve 0, ANG 2

**Development Status**

N/A

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

MOD OF SPARES

OGC

**INSTALLATION OF HARDWARE**

FY-99 78 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST
		76 3.9				
		2 0.1				
		[1] 0.0				
		[1] 0.1				
		1.8				
		0.0				
		[14] 0.5	[64]			
		14 0.5	64			
		78	6.5			

(Continued)

UNCLASSIFIED

Fact Sheet: C-21 MN-9702 8.33 KHZ VHF RADIO  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RD&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR			76	3.9
EQUIPMENT			2	0.1
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER			[1]	0.1
SUPPORT-EQUIP				
MOD OF SPARES				1.8
OGC				0.0
INSTALLATION OF HARDWARE				
FY-99 78 KITS			[78]	0.5
TOTAL INSTALL			78	0.5
TOTAL COST (BP-1100)			78	6.5

(Totals may not add due to rounding)

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 2 Months

Follow-On Lead Time: 2 Months

#### Milestones

	FY-99	FY-00
Contract Date (Month/CY)	07/99	12/99
Delivery Date (Month/CY)	09/99	02/00

#### Installation Schedule

	FY-99	FY-00
Quarters	1 2 3 4	1 2 3 4
Input	14 16 24 24	16 24 24
Output	14 16 24 24	

PE 0401314F Team MOBIL

## (Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-21 MN-DC101 FM IMMUNITY  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					77	1.1		
KITS NONRECUR					1	0.0		
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER					[1]	0.1		
SUPPORT-EQUIP								
MOD OF SPARES					[25]	0.3		
OGC						0.0		
INSTALLATION OF HARDWARE								
FY-99 78 KITS					[78]	0.0		
TOTAL INSTALL					78	0.0		
TOTAL COST (BP-1100)					78	1.6		

(Totals may not add due to rounding)

Method of Implementation: CLS

Initial Lead Time: 2 Months

Follow-On Lead Time: 1 Month

Milestones

	FY-99	FY-00
Contract Date (Month/CY)	07/99	12/99
Delivery Date (Month/CY)	09/99	01/00

Installation Schedule

	FY-99	FY-00
Quarters	1 2 3 4	1 2 3 4
Input	14 20 22 22	
Output	14 20 22 22	

Models of Aircraft Affected: C-21A

## MODIFICATION OF AIRCRAFT

WS) MN-TAWS

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-21 Class P

PE 0401314F  
Team MOBIL**Description/Justification**

This Nav/Safety mod installs the Terrain Awareness Warning System (TAWS) utilizing the Enhanced Ground Proximity Warning System (EGPWS) to provide ground warnings, terrain display, and terrain data base look ahead protection integrating GPS data with a terrain database. This modification is IAW SECDEF 26 Apr 96 letter requiring navigation and safety upgrades for the 89th Airlift Wing, Distinguished Visitor (DV) and Operational Support Airlift (OSA) airlift. This modification ties in with P3 TCAS II 9330 that will be installed concurrently to save on depot input time if done separately. This mod was previously approved and funded as a part of 9709C-GATM/New Generation Cockpit and is now being broken out separately. Projected contract date 7/30/99. Prototype 9/15/99. Installation Start 3/15/00. Installation completed 3/30/01.

**Aircraft Breakdown:** Active 76, Reserve 0, ANG 2

### Development Status

N/A

## Projected Financial Plan

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS			[76]	6.5								
KITS NONRECUR												
EQUIPMENT			76	4.1								
EQUIP NONREC			2	0.3		0.2						
CHANGE ORDERS						0.4						
DATA				0.3								
SIM/TRAINER			[1]		[1]	0.3						
SUPPORT-EQUIP												
TRAINING			[1]	0.3								
TESTING			[2]	0.1								
FLIGHT TEST												
OGC				0.0		0.4		0.3				
INSTALLATION OF HARDWARE												
FY-99			[50]	3.9	[23]	1.9		[5]		0.4		
78 KITS												
TOTAL INSTALL			50	3.9	23	1.9		5		0.4		
TOTAL COST (BP-1100)												
			78	15.4		3.2				0.7		
(Totals may not add due to rounding)												

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-21 MN-TAWS TERRAIN AWARENESS & WARNING SYS (TAWS)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							[76]	6.5
KITS NONRECUR								
EQUIPMENT							76	4.1
EQUIP NONREC							2	0.5
CHANGE ORDERS								0.4
DATA								0.3
SIM/TRAINER							[2]	0.3
SUPPORT-EQUIP								
TRAINING							[1]	0.3
TESTING							[2]	0.1
FLIGHT TEST								
OGC								0.7
INSTALLATION OF HARDWARE								
FY-99 78 KITS							[78]	6.2
TOTAL INSTALL							78	6.2
TOTAL COST (BP-1100)							78	19.3

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 2 Months

Follow-On Lead Time: 3 Months

#### Milestones

	FY-99	FY-00	FY-01
Contract Date (Month/CY)	06/99	10/99	10/00
Delivery Date (Month/CY)	08/99	01/00	01/01

#### Installation Schedule

	FY-99		FY-00		FY-01	
Quarters	1	2	3	4	1	2
Input		2	18	18	18	22
Output		2	18	18	18	22

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)					DATE February 2000		
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: C-22				
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005
	\$0.177	\$0.171	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000

This line item funds modifications to the C-22B aircraft. The C-22B, a Boeing 727-100, is a three engine medium-range aircraft used by the Air National Guard to airlift cargo and personnel. The overall goal of C-22 modifications is to fund service bulletins necessary for FAA certification while improving flight safety, reliability, and maintainability. There are no modifications budgeted for FY01. The specific modification budgeted and programmed is below.

MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
P 99999S	SERVICE BULLETINS	0.2	0.2							1.6
Z88888	REPROGRAMMINGS	0.1	0.1							0.1
TOTAL FOR CLASS P		0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.7
TOTAL FOR AIRCRAFT C-22		0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.7

Totals may not add due to rounding.

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: C-32			
	1999	2000	2001	2002	2003	2004
						2005
COST (In Mil)	\$0.000	\$0.488	\$23.568	\$35.880	\$6.855	\$0.000

This line item funds modifications to the C-32 aircraft, commercial equivalent Boeing 757. The C-32 is a long-range jet transport designed to transport VIPSAM passengers. The primary modifications budgeted in FY01 are the Communications Upgrade and Global Air Traffic Management (GATM). The overall goal is to improve flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

CLASS P	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01 18.0	FY-02 33.7	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
	9606	COMMUNICATIONS UP			5.4	2.0	6.7				51.7
	9709	GLOBAL AIR TRAFFIC			0.1	0.1	0.1				14.0
	99999S	SERVICE BULLETINS		0.3	0.1	0.1	0.1				0.6
	99999X	LOW COST MODIFICATI		0.2	0.1	0.1	0.1				0.5
	Z88888	REPROGRAMMINGS		0.1							0.1
TOTAL FOR CLASS P			0.0	0.6	23.6	35.9	6.9	0.0	0.0	0.0	66.9
TOTAL FOR AIRCRAFT C-32			0.0	0.6	23.6	35.9	6.9	0.0	0.0	0.0	66.9

Totals may not add due to rounding.

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02/15/2000  
 FY 2001 PBR  
 Modification Title and No: COMMUNICATIONS UPDATE MN-9606  
 Models of Aircraft Affected: C-32A

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: C-32  
 PE 0401314F Team MOBIL

Center: OC-ALC - Tinker AFB Okla City, OK

**Description/Justification**  
 The communication upgrade consists of installing a communications management system and integration with CSO functions, to manage secure and non-secure voice, data, and facsimile (transmit and receive) for 42 telephone stations within the aircraft. These aircraft support the Vice President, SECSTATE, SECDEF, and other senior government officials, as well as their staffs, allowing them to conduct business while airborne, utilizing the on-board communications system.

Aircraft Breakdown: Active 4, Reserve 0, ANG 0

**Development Status**  
 N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS							1	2.0	3	3.0		
KITS NONRECUR								6.0				
EQUIPMENT							[1]	9.1	[3]	29.2		
EQUIP NONREC												
CHANGE ORDERS												
DATA								0.5				
SIM/TRAINER												
SUPPORT-EQUIP								0.1		0.1		
OGC												
INSTALLATION OF HARDWARE												
FY-01 1 KITS							[1]	0.4	[3]	1.4		
FY-02 3 KITS												
TOTAL INSTALL							1	0.4	3	1.4		
TOTAL COST (BP-1100)							1	18.0	3	33.7		

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-32 MN-9606 COMMUNICATIONS UPDATE  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDTE&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					4	5.0		
KITS NONRECUR						6.0		
EQUIPMENT					[4]	38.4		
EQUIP NONREC								
CHANGE ORDERS								
DATA						0.5		
SIM/TRAINER								
SUPPORT-EQUIP								
OGC						0.1		
INSTALLATION OF HARDWARE								
FY-01 1 KITS					[1]	0.4		
FY-02 3 KITS					[3]	1.4		
TOTAL INSTALL					4	1.8		
TOTAL COST (BP-1100)					4	51.7		

(Totals may not add due to rounding)

Method of Implementation: CLS

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)	03/01	12/01		
Delivery Date (Month/CY)	09/01	06/02		

**Installation Schedule**

	FY-00		FY-01		FY-02		FY-03	
Quarters	1	2	3	4	1	2	3	4
Input				1		2	1	
Output					1	1	2	

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: GLOBAL AIR TRAFFIC MANAGEMENT (GATM) MN-9709  
 Models of Aircraft Affected: C-32A

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: C-32  
 PE 0401314F Team MOBIL

Center: OC-ALC - Tinker AFB Okla City, OK

**Description/Justification**  
 This GATM surveillance modification will install equipment required to meet Mid-term Global Air Traffic Management (GATM) System requirements. The modification will update the mode 'S' to level 4 with DAP, install CNS capability RNP 4, CPDLC, PRNAV-RNP-1, and upgrade the V-Nav system. These upgrades will interface with original equipment installed on the aircraft at delivery. Installation cost is included in the kit cost by Boeing, for all kits.

Aircraft Breakdown: Active 4, Reserve 0, ANG 0

**Development Status**  
 N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
OGC												
INSTALLATION OF HARDWARE												
FY-01 1 KITS									[1]	0.7		
FY-02 1 KITS											[3]	2.3
FY-03 2 KITS												
TOTAL INSTALL									1	0.7	3	2.3
TOTAL COST (BP-1100)									1	5.4	1	2.0
(Totals may not add due to rounding)											2	6.7

(Continued)

UNCLASSIFIED

Fact Sheet: C-32 MN-9709 GLOBAL AIR TRAFFIC MANAGEMENT (GATM)  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RD1&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					4	4.0		
KITS NONRECUR						3.2		
EQUIPMENT					[4]	3.2		
EQUIP NONREC								
CHANGE ORDERS						0.5		
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
OGC						0.1		
INSTALLATION OF HARDWARE								
FY-01 1 KITS							[1]	0.7
FY-02 1 KITS							[3]	2.3
FY-03 2 KITS								
TOTAL INSTALL					4	3.0		
TOTAL COST (BP-1100)					4	14.0		
(Totals may not add due to rounding)								

Method of Implementation: CLS

Initial Lead Time: 15 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)	03/01	06/02	12/02	
Delivery Date (Month/CY)	06/02	12/02	06/03	

**Installation Schedule**

	FY-01		FY-02		FY-03		FY-04	
Quarters	1	2	3	4	1	2	3	4
Input					1	1	1	
Output								1

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
P-1 ITEM NOMENCLATURE: C-37						
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications						
	1999	2000	2001	2002	2003	2004
						2005
COST (In Mil)	\$0.000	\$0.375	\$0.376	\$0.376	\$0.376	\$0.380
						\$0.379

This line item funds modifications to the C-37, commercial equivalent Gulfstream 5. The C-37 is a long-range jet transport designed to carry VIPSAM passengers. The overall goal of modifications budgeted in FY01 is to fund low cost modifications that will improve flight safety, reliability, and maintainability.

CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
P	99999S	SERVICE BULLETINS		0.3	0.3	0.3	0.3	0.3	0.3		1.8
	99999X	LOW COST MODIFICATI		0.1	0.1	0.1	0.1	0.1	0.1		0.4
	Z88888	REPROGRAMMINGS		0.1							0.1
TOTAL FOR CLASS P			0.0	0.5	0.4	0.4	0.4	0.4	0.4	0.0	2.3
TOTAL FOR AIRCRAFT C-37			0.0	0.5	0.4	0.4	0.4	0.4	0.4	0.0	2.3

Totals may not add due to rounding.

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: C-141			
	1999	2000	2001	2002	2003	2004
						2005
<b>COST (In Mil)</b>	\$32.836	\$10.770	\$0.737	\$0.818	\$0.801	\$0.825
						\$0.843

This line item funds modifications to the C-141 aircraft. The four engine C-141 delivers cargo and troops between strategic theaters of operation. It can carry up to 150 combat troops, 103 litter patients, or 13 standard 463-L pallets. The overall goal of the modifications budgeted in FY01 is to enhance flight safety while improving reliability and maintainability. The specific modifications budgeted and programmed are below.

CLASS P-S	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
	99999A	LOW COST SAFETY MO		0.3	0.6	0.7	0.7	0.7	0.7		6.2
TOTAL FOR CLASS P-S			0.0	0.3	0.6	0.7	0.7	0.7	0.7	0.0	6.2
P	13627B	AUTOPILOT/COCKPIT U	5.2								169.2
	3149TT	TRAFFIC ALERT & COL	22.3	8.7							45.1
	3150	NAVSTAR GLOBAL POS	3.7								68.7
	3455	AIRLIFT DEFENSIVE SY	0.9								27.6
	99999X	LOW COST MODIFICATI		0.1	0.1	0.1	0.1	0.1	0.1		3.4
	DC101	FM IMMUNITY		1.0							1.0
	Z88888	REPROGRAMMINGS	0.8	0.7							1.4
TOTAL FOR CLASS P			32.8	10.5	0.1	0.1	0.1	0.1	0.1	0.0	316.3
TOTAL FOR AIRCRAFT C-141			32.8	10.8	0.7	0.8	0.8	0.8	0.8	0.0	322.6

Totals may not add due to rounding.

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02/15/2000

FY 2001 PBR

Modification Title and No: AUTOPILOT/COCKPIT UPGRADE MN-13627B

Models of Aircraft Affected: C-141B

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0401118F Team MOBIL

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-141

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

**Description/Justification**

The all weather landing system (AWLS) as installed in the C-141 aircraft is of the mid-60's technology. Replacement of the AWLS system including the autopilot system is deemed necessary because of nonsupportability. Continual repair & overhaul of AWLS components (LRUs) in the field & at the depot Technical Repair Center (TRC) have resulted in difficulty in finding replacement LRU sub-parts to support the present AWLS. This mod will provide state-of-the-art autopilot with autoland capability, a Ground Collision Avoidance Subsystem, and enhanced instrumentation for display of flight direction, attitude, horizontal situation, altitude, airspeed, and vertical speed. This modification is being installed under the Mod Block Concept where all mods are installed while the aircraft is down. Mod 3455, 3150, 13652 and 13627 were initially budgeted for the installation to be accomplished separately. Under the Mod Block Concept, all four mods will be installed at the same time requiring the aircraft to be down only once. Because of this method of installation, the installation year and the quantities may not match. This mod is baselined with mod #13652B, 3150, and 3455.

Aircraft Breakdown: Active 0, Reserve 45, ANG 18

**Development Status**

N/A.

**Projected Financial Plan**

RDT&E (3600)

**PROCUREMENT (3010)**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
INSTALL KITS	62	8.0				
KITS NONRECUR	1	3.6				
EQUIPMENT	[62]	52.0				
EQUIP NONREC	[1]	4.6				
CHANGE ORDERS		2.4				
DATA		10.1				
SIM/TRAINER	[7]	13.6				
SUPPORT-EQUIP		4.6				
FLT LINE LOADER		5.1				
CONT LIABILITY		15.7				
SOFTWARE		17.2				
FLIGHT TEST		1.0				
OGC		4.0				0.1
INSTALLATION OF HARDWARE						
FY-92	1	KITS	[1]			
FY-94	1	KITS	[1]			
FY-96	40	KITS	[40]			
FY-97	21	KITS	[8]			
TOTAL INSTALL	50	22.0	13	5.2		
TOTAL COST (BP-1100)	63	163.9				5.2
(Totals may not add due to rounding)						

(Continued)

UNCLASSIFIED

Fact Sheet: C-141 MN-13627B AUTOPILOT/COCKPIT UPGRADE

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					62	8.0		
KITS NONRECUR					1	3.6		
EQUIPMENT					[62]	52.0		
EQUIP NONREC					[1]	4.6		
CHANGE ORDERS						2.4		
DATA						10.1		
SIM/TRAINER					[7]	13.6		
SUPPORT-EQUIP						4.6		
FLT LINE LOADER						5.1		
CONT LIABILITY						15.7		
SOFTWARE						17.2		
FLIGHT TEST						1.0		
OGC						4.1		
INSTALLATION OF HARDWARE								
FY-92 1 KITS					[1]			
FY-94 1 KITS					[1]	0.7		
FY-96 40 KITS					[40]	17.7		
FY-97 21 KITS					[21]	8.8		
TOTAL INSTALL					63	27.2		
TOTAL COST (BP-1100)					63	169.2		

(Totals may not add due to rounding)

Method of Implementation: COMBINATION

Initial Lead Time: 24 Months

Follow-On Lead Time: 12 Months

#### Milestones

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
Contract Date (Month/CY)	03/93	06/94	03/95		09/96	03/97			
Delivery Date (Month/CY)	03/95	03/95			09/97	03/98			

#### Installation Schedule

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input									
Output									
Quarters	1 2 3 4								
Input									
Output	13 2 3								

02/15/2000

FY 2001 PBR

Modification Title and No: TRAFFIC ALERT &amp; COLLISION AVOIDANCE SYSTEM/TAWS MN-3149TT

Models of Aircraft Affected: C141B, C

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0401118F Team MOBIL

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-141UNCLASSIFIED  
MODIFICATION OF AIRCRAFTDescription/Justification

This navigation and safety modification installs TCAS/TAWS on the C-141 aircraft. TCAS II (MODE S) is an airborne traffic alert and collision avoidance advisory system that provides pilots with visual alert of approaching traffic and aural announcement of suggested avoidance maneuvers without support from air traffic control ground systems. TCAS will be installed on 33 C-141Bs and 63 C-141Cs. The modification installs Terrain Awareness and Warning System (TAWS) on 63 C-141Cs to help prevent Controlled Flight into Terrain (CFIT) accidents. Mod 0Q606, Enhanced Ground Proximity Warning System, was combined with TCAS to reduce duplicate costs and reduce aircraft downtime.

Aircraft Breakdown: Active 31, Reserve 45, ANG 18

Development Status

N/A

Projected Financial Plan

RDT&amp;E (3600)

## PROCUREMENT (3010)

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
INSTALL KITS	23	1.4	55	2.9	14	1.2
KIT'S NONREC	2	2.6				
EQUIPMENT	[23]	5.8	[55]	11.3	[14]	2.8
EQUIP NONREC	[2]	0.5				
CHANGE ORDERS						
DATA		0.6		0.9		
SIM/TRAINER	[3]	3.1	[5]	4.4		
SUPPORT-EQUIP				0.4		
FLIGHT TEST				0.9		
OGC		0.0		0.6		0.4
INSTALLATION OF HARDWARE						
FY-98 25 KITS			[12]	0.7	[13]	0.8
FY-99 55 KITS					[55]	2.6
FY-00 14 KITS					[14]	0.9
TOTAL INSTALL			12	0.7	82	4.3
TOTAL COST (BP-1100)	25	14.1	55	22.3	14	8.7

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-141 MN-3149TT TRAFFIC ALERT & COLLISION AVOIDANCE SYSTEM/TAWS

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RD&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			92	5.5
KITS NONRECUR			2	2.6
EQUIPMENT			[92]	19.9
EQUIP NONREC			[2]	0.5
CHANGE ORDERS				0.9
DATA				0.9
SIM/TRAINER			[8]	7.5
SUPPORT-EQUIP				0.4
FLIGHT TEST				0.9
OGC				1.0
INSTALLATION OF HARDWARE				
FY-98 25 KITS			[25]	1.5
FY-99 55 KITS			[55]	2.6
FY-00 14 KITS			[14]	0.9
TOTAL INSTALL			94	5.0
TOTAL COST (BP-1100)			94	45.1

(Totals may not add due to rounding)

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 6 Months Follow-On Lead Time: 3 Months

**Milestones**

	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	09/98	03/99	12/99	
Delivery Date (Month/CY)	03/99	06/99	03/00	

**Installation Schedule**

	FY-98	FY-99	FY-00	FY-01
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input		1	28 32 31	
Output		1	17 33 32 11	

02/15/2000

FY 2001 PBR

Modification Title and No: NAVSTAR GLOBAL POSITIONING SYSTEM MN-3150

Models of Aircraft Affected: C-141B

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: WR-ALC Warner Robins AFB Warner Robins, GA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-141

PE 0401118F Team MOBIL

**Description/Justification**

Procures integration and installation of navigation equipment to comply with the congressional FY2000 mandate and Air Force Navigation/Safety equipment master baseline. Equipment includes the following principal components: two commercially procured Flight Management Systems with P/Y code capability, three commercial-off-the-shelf multi-function control display units, two commercial-off-the-shelf GPS antennas, and one non-developmental data loader subsystem. Aircraft integration meets the intent of FAA requirements for GPS enroute navigation and non-precision approach capability. Modification is being installed under the Mod Block Concept where all mods are installed while the aircraft is down. Mod 3455, 3150, 13652 and 13627 were initially budgeted for the installation to be accomplished separately. Under the Mod Block Concept, all four mods will be installed at the same time requiring the aircraft to be down only once. Because of this method of installation, the installation year and the quantities may not match. This mod is baselined with mod #s 13627B, 13652B and 3455.

Aircraft Breakdown: Active 0, Reserve 45, ANG 18

**Development Status**  
Complete.**Projected Financial Plan**

	PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		0.2										
PROCUREMENT (3010)												
INSTALL KITS	62	5.7										
KITS NONREC	1	8.1										
EQUIPMENT	[62]	14.9										
EQUIP NONREC	[1]	1.3										
CHANGE ORDERS				1.0								
DATA		1.7										
SIM/TRAINER	[6]	10.6										
SUPPORT-EQUIP		0.2										
SOFTWARE		15.4										
FLIGHT TEST		1.5										
OGC		2.7										
WARRANTY		0.4										
INSTALLATION OF HARDWARE												
FY-96	[2]	0.4										
2 KITS												
FY-97	[47]	2.1										
61 KITS												
TOTAL INSTALL	49	2.4	14	1.9								
TOTAL COST (BP-1100)	63	65.1										
(Totals may not add due to rounding)												



(Continued)

UNCLASSIFIED

Fact Sheet: C-141 MN-3150 NAVSTAR GLOBAL POSITIONING SYSTEM

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								0.2
PROCUREMENT (3010)								
INSTALL KITS					62	5.7		
KITS NONRECUR					1	8.1		
EQUIPMENT					[62]	14.9		
EQUIP NONREC					[1]	1.3		
CHANGE ORDERS						1.0		
DATA						1.7		
SIM/TRAINER					[6]	10.6		
SUPPORT-EQUIP						0.2		
SOFTWARE						15.4		
FLIGHT TEST						1.5		
OGC						3.4		
WARRANTY						0.4		
INSTALLATION OF HARDWARE								
FY-96 2 KITS					[2]	0.4		
FY-97 61 KITS					[61]	4.0		
TOTAL INSTALL					63	4.3		
TOTAL COST (BP-1100)					63	68.7		

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 10 Months

Follow-On Lead Time: 7 Months

**Milestones**

Contract Date (Month/CY)

Delivery Date (Month/CY)

FY-01

FY-00

FY-99

FY-98

FY-97

FY-96

FY-95

FY-94

FY-93

FY-92

FY-91

FY-90

FY-89

FY-88

FY-87

FY-86

**Installation Schedule**

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Quarters	1	2	3	4	1	2	3	4	1
Input	2	3	4	1	2	3	4	1	2
Output	3	4	1	2	3	4	1	2	3

	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07	FY-08	FY-09	FY-10
Quarters	1	2	3	4	1	2	3	4	1	2
Input	2	3	4	1	2	3	4	1	2	3
Output	3	4	1	2	3	4	1	2	3	4

Center: WR-ALC Warner Robins AFB Warner Robins, GA

**TOTAL COST (BP-1100)**  
(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-141 MN-DC101 FM IMMUNITY  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
OGC				
TOTAL COST (BP-1100)				
(Totals may not add due to rounding)				

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 1 Month

Follow-On Lead Time: 0 Months

**Milestones**

FY-00

Contract Date (Month/CY) 03/00

Delivery Date (Month/CY) 04/00

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: T-1 Mods			
	1999	2000	2001	2002	2003	2004
						2005
COST (In Mil)	\$7.520	\$0.006	\$0.000	\$0.000	\$0.000	\$0.000

This line item funds modifications to the T-1A aircraft. The T-1A is a missionized Beech 400A used in the Airlift/Tanker track of USAF Specialized Undergraduate Pilot Training (SUPT) for Air Education and Training Command (AETC). It is powered by two Pratt and Whitney JT15D-5 turbofan engines mounted on the aft fuselage producing 2,900 pounds of thrust each. Avionics include UHF and VHF radios, INS, TACAN, ADF, and two VOR/ILS. There are no modifications budgeted in FY01.

CLASS	MOD	MODIFICATION	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST	TOTAL
P	NR	TITLE								IO GO	PROG.
	3150	NAVSTAR GLOBAL POS	7.4	0.1							35.6
	Z88888	REPROGRAMMINGS	0.2	0.1							0.2
TOTAL FOR CLASS P			7.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	35.8
TOTAL FOR AIRCRAFT T-1			7.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	35.8

Totals may not add due to rounding.

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UNCLASSIFIED

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UNCLASSIFIED

Fact Sheet: T-1 MN-3150 NAVSTAR GLOBAL POSITIONING SYSTEM  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					179	28.5		
KITS NONRECUR					1	4.0		
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER						2.0		
SUPPORT-EQUIP						0.1		
OGC						0.7		
OPTION 1						0.3		
INSTALLATION OF HARDWARE								
FY-96 63 KITS								
FY-97 41 KITS								
FY-98 29 KITS								
FY-99 47 KITS								
TOTAL INSTALL								
TOTAL COST (BP-1100)					180	35.6		

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

#### Milestones

FY-96

Contract Date (Month/CY)

Delivery Date (Month/CY)

#### Installation Schedule

	FY-96			
Quarters	1	2	3	4
Input				
Output				

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)				DATE February 2000				
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications				P-1 ITEM NOMENCLATURE: T-3 Mods				
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005	
	\$0.095	\$2.159	\$1.949	\$0.000	\$0.000	\$0.000	\$0.000	

The T-3 is a single engine, propeller driven, two seat (side-by-side), trainer used by AETC as a flight screener for Undergraduate Pilot Training. The overall goal of the modification budgeted in the FY01 is to enhance flight safety. The primary modification in FY01 is the T-3 Recovery System. The specific modification budgeted and programmed is below.

CLASS P-S	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
	99999A	LOW COST SAFETY MO	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.6
TOTAL FOR CLASS P-S											
P	4962	T-3 RECOVERY SYSTE		1.9	1.9						3.8
	Z88888	REPROGRAMMINGS	0.1	0.1							0.1
TOTAL FOR CLASS P											
			0.1	2.1	1.9	0.0	0.0	0.0	0.0	0.0	3.9
TOTAL FOR AIRCRAFT T-3											
			0.2	2.2	2.0	0.0	0.0	0.0	0.0	0.0	4.5

Totals may not add due to rounding.

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PE 0804748F Team PERSO

(Continued)

UNCLASSIFIED

Fact Sheet: T-3 MN-4962 T-3 RECOVERY SYSTEM  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					109	0.3		
KITS NONRECUR					1	0.1		
EQUIPMENT					[109]	2.2		
EQUIP NONREC					[1]	0.1		
CHANGE ORDERS								
DATA								
SIM/TRAINER						0.1		
SUPPORT-EQUIP								
OGC						0.9		
INSTALLATION OF HARDWARE								
FY-00 1 KITS					[28]	0.0		
FY-01 109 KITS					[82]	0.1		
TOTAL INSTALL					110	0.1		
TOTAL COST (BP-1100)					110	3.8		

(Totals may not add due to rounding)

Method of Implementation: COMBINATION

Initial Lead Time: 12 Months

Follow-On Lead Time: 3 Months

Milestones

FY-00 FY-01 FY-02  
Contract Date (Month/CY) 12/99  
Delivery Date (Month/CY) 12/99

Installation Schedule

	FY-00			FY-01			FY-02		
Quarters	1	2	3	4	1	2	3	4	
Input				28	28	27	27		
Output					28	28	27	27	

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UNCLASSIFIED

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: T-38			
	1999	2000	2001	2002	2003	2004
						2005
COST (In Mil)	\$25.089	\$43.987	\$120.520	\$139.816	\$163.366	\$167.591
						\$118.140

The T-38 is a twin engine, two seat (tandem), supersonic jet trainer used by Air Education Training Command as an advanced trainer in Undergraduate Pilot Training. The primary modification budgeted in FY01 is the Avionics Upgrade. Other modifications are budgeted to enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
10206A	FUS STA 325 BULKHEAD	7.2	7.9	6.2	2.1					57.4
14207B	COCKPIT ENCLOSURE	1.1	2.4	2.1						70.8
99999A	LOW COST SAFETY MO			0.1	0.2	0.1	0.1	0.1	0.1	2.0
TOTAL FOR CLASS P-S										
6029	AVIONICS UPGRADE	8.3	10.4	8.4	2.3	0.1	0.1	0.1	0.1	130.1
6034	T-38 PROPULSION MOD	16.7	31.0	81.0	78.4	97.8	99.5	53.1	123.8	581.2
99999X	LOW COST MODIFICATI			31.3	59.1	65.5	68.1	65.1	452.1	741.1
Z88888	REPROGRAMMINGS	0.1	2.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TOTAL FOR CLASS P										
		16.8	33.6	112.3	137.6	163.4	167.7	118.2	576.0	1,325.2
TOTAL FOR AIRCRAFT T-38										
		25.1	44.0	120.7	139.9	163.5	167.8	118.3	576.1	1,455.2

Totals may not add due to rounding.

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02/15/2000

FY 2001 PBR

Modification Title and No: FUS STA 325 BULKHEAD FORMER CHANGEOUT MN-10206A

Models of Aircraft Affected: T-38

Center: SA-ALC Kelly AFB, San Antonio, TX

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: T-38

PE 0804741F Team PERSO

**Description/Justification**

Aircraft is developing cracks in six locations on the 325 former. Repairs only retard crack growth. Data indicates crack growth will be beyond safety limits. Stress corrosion cracking is unpredictable. Install schedule has slip two years due to initial contract award from Apr 94 to Jan 94 and (1) Contract Field Team space reduce to one hanger due to T-43 Nav trainer move to Randolph, (2) Organic production at Kelly start up problems and cancellation after two years, (3) relocation of CFT at Randolph, (4) combination of Cockpit Enclosure Mod and 325 Bulkhead docks limits production until Cockpit Enclosure is completed in FY00.

Aircraft Breakdown: Active 517, Reserve 0, ANG 0

**Development Status**

N/A

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

INSTALL KITS 517 13.1

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

**INSTALLATION OF HARDWARE**

FY-93 166 KITS [166] 17.4

FY-94 201 KITS [42] 3.4

FY-95 32 KITS [28] 1.7

FY-96 57 KITS [57] 3.4

FY-97 61 KITS [19] 1.2

TOTAL INSTALL 208 20.8 61 7.2 102 7.9 104 6.2 42 2.1

TOTAL COST (BP-1100) 517 33.9 7.2 6.2 2.1

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: T-38 MN-10206A FUS STA 325 BULKHEAD FORMER CHANGEOUT

(Continued)

FY-04	FY-05	TO COMP	TOTAL
QTY	COST	QTY	COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONREC

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

INSTALLATION OF HARDWARE

FY-93 166 KITS

FY-94 201 KITS

FY-95 32 KITS

FY-96 57 KITS

FY-97 61 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

Method of Implementation: OVERHAUL/CFT

Initial Lead Time: 12 Months

Follow-On Lead Time: 24 Months

Milestones

Contract Date (Month/CY)	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
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Delivery Date (Month/CY)	03/95	03/96	03/97	12/97	09/98	09/98				
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Installation Schedule

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1	2	3	4	1	2	3	4	1	2
Input	2	3	4	1	2	3	4	1	2	3
Output	3	4	1	2	3	4	1	2	3	4

	FY-01	FY-02
Quarters	1	2
Input	2	3
Output	3	4

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: COCKPIT ENCLOSURE (PC) MN-14207B  
 Models of Aircraft Affected: T-38

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P-S  
 CLC: T-38  
 PE 0804741F Team PERSO

Center: SA-ALC Kelly AFB, San Antonio, TX

**Description/Justification**  
 Fatigue cracks combined with corrosion are being found in the cockpit longeron at an increasing rate. The damage is also being found around the canopy hook slots and longeron splice. The critical nature of the structural components limits the type and number of authorized repairs before loss of structural integrity leading to catastrophic failure of structural components and/or loss of personnel. This modification will redesign and strengthen the aging structural components, incorporate a new canopy latching system, and strengthen other structurally related areas/components. Install schedule slippage due to same factors as the 325 Bulkhead mod. Installs for 2 non-recr kits funded with non-recr line.

Aircraft Breakdown: Active 517, Reserve 0, ANG 0

**Development Status**  
 N/A

**Projected Financial Plan**

RDT&E (3600)													
PROCUREMENT (3010)													
INSTALL KITS		515	15.0										
KITS NONRECUR		2	0.4										
EQUIPMENT													
EQUIP NONREC													
CHANGE ORDERS													
DATA		0.2											
SIM/TRAINER													
SUPPORT-EQUIP													
INSTALLATION OF HARDWARE													
FY-90 25 KITS		[25]	2.2										
FY-91 125 KITS		[125]	17.3										
FY-92 207 KITS		[207]	20.4										
FY-93 19 KITS		[19]	2.3										
FY-94 67 KITS		[67]	6.2										
FY-95 13 KITS		[13]	0.7										
FY-97 61 KITS		[2]	0.4	[12]	1.1	[24]	2.4	[23]	2.1				
TOTAL INSTALL		458	49.5	12	1.1	24	2.4	23	2.1				
TOTAL COST (BP-1100)		517	65.1			1.1	2.4			2.1			
(Totals may not add due to rounding)													

(Totals may not add due to rounding)



(Continued)

UNCLASSIFIED

Fact Sheet: T-38 MN-14207B COCKPIT ENCLOSURE (PC)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					515	15.0		
KITS NONRECUR					2	0.4		
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								0.2
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-90 25 KITS					[25]	2.2		
FY-91 125 KITS					[125]	17.3		
FY-92 207 KITS					[207]	20.4		
FY-93 19 KITS					[19]	2.3		
FY-94 67 KITS					[67]	6.2		
FY-95 13 KITS					[13]	0.7		
FY-97 61 KITS					[61]	6.0		
TOTAL INSTALL					517	55.1		
TOTAL COST (BP-1100)					517	70.8		

(Totals may not add due to rounding)

Method of Implementation: OVERHAUL/CFT

Initial Lead Time: 24 Months

Follow-On Lead Time: 24 Months

Milestones

	FY-90	FY-91	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	06/90	06/91	12/91	12/92	12/93	12/94		09/98					
Delivery Date (Month/CY)	06/92	06/93	12/93	12/94	12/95	12/96		09/00					

Installation Schedule

	FY-90	FY-91	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters 1	2	3	4	1	2	3	4	1	2	3	4	1	2
Input					2	1	3	20	38	23	23	23	34
Output						2	1	3	20	38	23	23	34
Quarters 1	2	3	4	1	2	3	4	1	2	3	4	1	2
Input	15	14	15	8	2	5	6	6	6	6	6	6	5
Output	14	15	14	15	8	2	5	5	6	6	6	6	5

02/15/2000

FY 2001 PBR

Modification Title and No: AVIONICS UPGRADE MN-6029

Models of Aircraft Affected: T-38

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: T-38

PE 0804741F Team PERSO

**Description/Justification**

Since 1962, when A/T-38s entered service, avionics technology has been revolutionized. Current bombers and fighters have more complex avionics systems. Lacking these systems, we cannot use A/T-38s to train standard avionics and cockpit management skills. Current avionics suites have low reliability and maintainability rates. The upgrade includes a glass cockpit, with HUD, resembling current and proposed bombers and fighters, and GPS/INS to meet Congressional mandates. These changes eliminate the A/T-38s training deficiencies. The upgrade also includes 36 Aircraft Training Devices (ATDs - 3 Types) for complete training systems. Change orders are reserved for significant, evolving FAA, NAS, GPS, and TCAS requirements. FY00 Production costs include nonrecurring, fixed costs to startup installation line. OGC are PMA costs only and include training, travel, support contracts, supplies, and computer support. Effort includes contractor proposed 6 year full system warranty measured by essential performance parameters.

Note: It appears as if we are buying early to need because the Projected Financial Plan Installation Quantity does not agree with Installation Schedule. FY00 buys were impacted by the resolution of the FY00 Appropriation Bill and 3 month late award of LRIP. FY01-07 installation buys are programmed for calendar year (Jan-Dec) to take advantage of allowable QTR offset and continuous production. The contractual vehicle is written for economic quantity buys not multiple small buys. Economic quantity breaks in kits and warranties reduce unit cost by 10.4 %. The installation schedule is accurate. This software does not handle the above situation.

Aircraft Breakdown: Active 509, Reserve 0, ANG 0

**Development Status**

FY 98: Completed 2 EMD prototypes and ATD FDR. Performed ground testing, and first flight. FY99: Completed DT&E Testing. Conducted Phase I IOT&E, FCA and PRR. LRIP approved. Built, integrated, and start testing on 2 ATDs. FY00: Complete ATD acceptance testing and assemble first ATD at first base. Complete Phase II DT/ IOT&E testing and obtain full rate production approval.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		52.5		17.9		4.0		2.2				
PROCUREMENT (3010)												
INSTALL KITS			25	1.9	13	1.1	76	5.3	83	5.7	95	6.6
KITS NONRECUR			[1]	0.1								
EQUIPMENT			[25]	14.1	[13]	7.7	[76]	38.7	[83]	41.8	[95]	47.9
EQUIP NONREC												
CHANGE ORDERS				0.1		1.3	5.0	4.9				6.1
DATA						0.1	0.1	0.1				0.3
SIM/TRAINER					[3]	6.5	[8]	19.7	[5]	12.3	[9]	22.9
SUPPORT-EQUIP				0.1								
RETROFIT KITS						0.7	0.5	0.6				0.4
WARRANTY				0.3		2.6	3.3	3.1				3.7
OGC												

(Continued)

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Fact Sheet: T-38 MN-6029 AVIONICS UPGRADE

**Projected Financial Plan Continued**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
INSTALLATION OF HARDWARE												
FY-99 25 KITS												
FY-00 13 KITS					[12]	10.9	[13]	2.1				
FY-01 76 KITS							[13]	2.1				
FY-02 83 KITS							[25]	4.0				
FY-03 95 KITS									[51]	6.2	[52]	6.1
FY-04 99 KITS									[31]	3.8	[33]	3.8
FY-05 41 KITS												
FY-06 77 KITS												
TOTAL INSTALL					12	10.9	51	8.2	82	10.0	85	9.9
TOTAL COST (BP-1100)			25	16.7	13	31.0	76	81.0	83	78.4	95	97.8

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: T-38 MN-6029 AVIONICS UPGRADE  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								76.6
PROCUREMENT (3010)								
INSTALL KITS	99	6.9	41	3.7	77	6.8	509	38.0
KITS NONRECUR							[1]	0.1
EQUIPMENT	[99]	50.6	[41]	27.0	[77]	49.6	[509]	277.5
EQUIP NONREC								
CHANGE ORDERS		6.3		3.2		39.1		65.9
DATA		0.5		0.1		0.1		1.2
SIM/TRAINER	[7]	21.4	[2]	7.9			[34]	90.7
SUPPORT-EQUIP								
RETROFIT KITS								0.1
WARRANTY		0.2		0.2		0.5		3.2
OGC		3.4		3.8		9.3		29.6
INSTALLATION OF HARDWARE								
FY-99	25 KITS						[25]	13.1
FY-00	13 KITS						[13]	2.1
FY-01	76 KITS						[76]	10.3
FY-02	83 KITS						[83]	9.8
FY-03	95 KITS	7.1					[95]	10.9
FY-04	99 KITS	3.1	[51]	7.3	[21]	2.6	[99]	13.0
FY-05	41 KITS				[41]	5.1	[41]	5.1
FY-06	77 KITS				[77]	10.7	[77]	10.7
TOTAL INSTALL	89	10.2	51	7.3	139	18.4	509	75.0
TOTAL COST (BP-1100)	99	99.5	41	53.1	77	123.8	509	581.2
(Totals may not add due to rounding)								

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 10 Months

Follow-On Lead Time: 10 Months

Milestones

Contract Date (Month/CY)  
Delivery Date (Month/CY)

	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07	FY-08
				10/99	10/99	12/00	12/01	12/02	12/03	12/04	12/05	12/06	
				08/00	08/00	10/01	10/02	10/03	10/04	10/05	10/06	10/07	

Installation Schedule

	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07	FY-08
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1
Input													
Output													

**Installation Schedule Continued**

	FY-04			FY-05			FY-06			FY-07			FY-08		
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
Input	23	21	21	18	15	16	16	18	19	19	19	19	17		
Output	22	22	22	20	16	15	16	17	18	19	19	20	20	9	

UNCLASSIFIED

(Continued)

02/15/2000

FY 2001 PBR

Modification Title and No: T-38 PROPULSION MODERNIZATION PROGRAM MN-6034

Models of Aircraft Affected: T-38

Center: SA-ALC Kelly AFB, San Antonio, TX

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: T-38

PE 0804741F Team PERSO

**Description/Justification**

The T-38 Propulsion System Modernization program includes: 1)J85-5 Engine Modernization; 2) Propulsion System Air Induction Inlet/332 Former/362 Bulkhead replacement; and 3) Propulsion System Ejector Nozzle Modification Upgrade.

J85-5 Engine Modernization: Improving engine components will decrease risk of failure, decrease threat to pilot production, and increase overall aircraft safety. Engine experienced two Class A mishaps, one was Class C with Class A potential, and 4 additional rotor failures in the previous two years due to corrosion pit cracking. Class A mishap and non-recoverable in-flight shutdown currently above PPGM risk management threshold; new spooled compressor design will eliminate corrosion safety concerns. More reliable engine components and spooled compressor rotor will decrease maintenance man-hours and overall T-38 system support costs. Engine Modernization Kits will be installed on engines at the Engine Regional Repair Facility in conjunction with regularly scheduled maintenance.

Propulsion System Air Induction Inlet/332 Former/362 Bulkhead/Ejector Nozzle Replacement. The modified inlet, when combined with the Ejector Nozzle will increase single engine performance during takeoff and landing. Aircraft is developing stress corrosion cracks in the propulsion system inlet at Fuselage Station (F. S.) 332 Former and F.S. 362 Bulkhead. Replacement of F.S. 332 Former/F.S. 362 Bulkhead in this program, is the only solution to return structural integrity of the airframe. Data indicates crack growth will continue with out former/bulkhead replacement. Stress corrosion cracking is unpredictable. Long term neglect will result in impact to safety.

Note: It appears as if we are buying early to need because the Projected Financial Plan Installation Quantity does not agree with Installation Schedule. FY01-10 installation buys are programmed for calendar year (Jan-Dec) to take advantage of allowable QTR offset. The contractual vehicle is written for economic quantity buys not multiple small buys. Economic quantity breaks in engine kits reduce unit cost by 28.3%. The installation schedule is accurate. This software does not handle the above situation.

Aircraft Breakdown: Active 509, Reserve 0, ANG 0

**Development Status**

J-85 Upgraded Engineer Components Developed under CIP. FY01: Plan to update T-38 software for changes brought about my this modification.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)						2.0						
PROCUREMENT (3010)												
INSTALL KITS							20	2.7	42	5.9	48	5.7
KITS NONRECUR												
EQUIPMENT							[20]	20.1	[42]	43.0	[48]	41.5
EQUIP NONREC								0.6		1.0		
CHANGE ORDERS								1.2		2.8		3.0
DATA								0.5				
SIM/TRAINER												
SUPPORT-EQUIP									[1]	0.5	[25]	9.0
MOD OF SPARES												
TOOLING										1.8		2.2
OGC												
TEST												

## UNCLASSIFIED

Fact Sheet: T-38 MN-6034 T-38 PROPULSION MODERNIZATION PROGRAM

(Continued)

**Projected Financial Plan Continued**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
INSTALLATION OF HARDWARE												
FY-01	20						[6]	1.1	[14]	1.6	[20]	1.9
FY-02	42								[22]	2.5	[22]	2.1
FY-03	48											
FY-04	52											
FY-05	45											
FY-06	59											
FY-07	60											
FY-08	84											
FY-09	84											
FY-10	15											
TOTAL INSTALL							6	1.1	36	4.2	42	4.1
TOTAL COST (BP-1100)							20	31.3	42	59.1	48	65.5

(Totals may not add due to rounding)

UNCLASSIFIED

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RD&E (3600)								2.0
PROCUREMENT (3010)								
INSTALL KITS	52	6.3	45	6.7	302	39.4	509	66.6
KITS NONRECUR								
EQUIPMENT	[52]	45.9	[45]	49.0	[302]	288.8	[509]	488.3
EQUIP NONREC								1.6
CHANGE ORDERS		3.0		2.4		16.9		29.4
DATA								0.5
SIM/TRAINER								
SUPPORT-EQUIP								
MOD OF SPARES	[16]	5.9			[142]	58.3	[184]	73.7
TOOLING								0.3
OGC		2.2		2.1		13.3		22.9
TEST								3.5
INSTALLATION OF HARDWARE								
FY-01 20 KITS							[20]	2.7
FY-02 42 KITS							[42]	4.5
FY-03 48 KITS	[26]	2.6					[48]	4.7
FY-04 52 KITS	[22]	2.2	[30]	3.0			[52]	5.2
FY-05 45 KITS			[18]	1.8	[27]	2.8	[45]	4.6
FY-06 59 KITS					[59]	6.2	[59]	6.2
FY-07 60 KITS					[60]	6.4	[60]	6.4
FY-08 84 KITS					[84]	9.1	[84]	9.1
FY-09 84 KITS					[84]	9.3	[84]	9.3
FY-10 15 KITS					[15]	1.7	[15]	1.7
TOTAL INSTALL	48	4.7	48	4.8	329	35.4	509	54.3
TOTAL COST (BP-1100)	52	68.1	45	65.1	302	452.1	509	741.1

(Totals may not add due to rounding)

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 9 Months

Follow-On Lead Time: 9 Months

**Milestones**

Contract Date (Month/CY)  
 Delivery Date (Month/CY)

FY-00 FY-01 FY-02 FY-03 FY-04 FY-05 FY-06 FY-07 FY-08 FY-09 FY-10 FY-11

**Installation Schedule**

	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07	FY-08	FY-09	FY-10	FY-11	FY-12	FY-13	FY-14	FY-15	FY-16	FY-17
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Input																		
Output																		



UNCLASSIFIED

Fact Sheet: T-38 MN-6034 T-38 PROPULSION MODERNIZATION PROGRAM

(Continued)

Installation Schedule Continued

		FY-08				FY-09				FY-10				FY-11			
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Input	14	14	14	21	21	21	21	21	21	21	21	15					
Output	14	14	14	14	21	21	21	21	21	21	21	21	21	21	15		

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: T-41			
	1999	2000	2001	2002	2003	2004
						2005
<b>COST (In Mil)</b>	\$0.095	\$0.089	\$0.089	\$0.089	\$0.089	\$0.092
						\$0.094

The T-41 is a military derivative of the civilian Cessna 172, a four seat, propeller driven, light aircraft used by USAFA in support of the aeronautical engineering course curriculum. The overall goal of the modification budgeted in FY01 is to enhance flight safety while improving reliability and maintainability. The specific modification budgeted and programmed is below.

CLASS	MOD	MODIFICATION	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
P	99999X	LOW COST MODIFICATI	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.9
	Z88888	REPROGRAMMINGS	0.1	0.1							0.1
TOTAL FOR CLASS P			0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	1.0
TOTAL FOR AIRCRAFT T-41			0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	1.0

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 47	PAGE NO. 1
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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications				P-1 ITEM NOMENCLATURE: T-43			
	1999	2000	2001	2002	2003	2004	2005
COST (In Mil)	\$5.656	\$0.708	\$4.929	\$3.719	\$0.329	\$7.212	\$10.703

The T-43 is a military derivative of the Boeing 737 used by AETC as an airborne training platform in Undergraduate Navigator Training. The primary modification budgeted in FY01 is the Terrain Awareness Warning System (TAWS). Other modifications are budgeted to enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

CLASS P	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
	3149F	FLIGHT DATA RECORD	0.8								5.7
	3149T	TRAFFIC ALERT & COL						1.7	6.5		11.3
	3150	NAVSTAR GLOBAL POS	1.3								6.7
	99999S	SERVICE BULLETINS	0.4	0.7	0.3	0.2	0.2	1.7	1.3		5.9
	99999X	LOW COST MODIFICATI	0.1	0.1	0.1	0.1	0.1	0.1	0.1		1.8
	TAWS	TERRAIN AWARENESS			4.5	3.5	3.7		2.9		14.5
	Z88888	REPROGRAMMINGS	3.1	0.1							3.1
TOTAL FOR CLASS P			5.7	0.9	4.9	3.7	0.3	7.2	10.7	0.0	49.0
TOTAL FOR AIRCRAFT T-43			5.7	0.9	4.9	3.7	0.3	7.2	10.7	0.0	49.0

Totals may not add due to rounding.

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02/15/2000

FY 2001 PBR

Modification Title and No: NAVSTAR GLOBAL POSITIONING SYSTEM MN-3150

Models of Aircraft Affected: CT/T-43, DV/TRAINING

AIRCRAFT

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: T-43

Center: OC-ALC - Tinker AFB Okla City, OK

PE 0804742F Team PERSO

**Description/Justification**

This navigation and safety modification will install dual Litton 410 flight management systems and Trimble GPS receivers and antennas. This modification is applicable to all T/CT-43 aircraft but only the CT-43 requires P code capability. Two prototypes are required due to the different avionics equipment and cockpit layout on T-43s and CT-43s. The retrofit kit to be purchased in FY98 is to add FAA certified P code capability to the CT-43 aircraft which was not available at the time the prototype GPS was installed. Prototype funding includes the cost of the two FY 97 installations.

Aircraft Breakdown: Active 11, Reserve 0, ANG 0

**Development Status**

N/A.

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

INSTALLATION OF HARDWARE

FY-95 2 KITS

FY-97 9 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
9	1.1											
2	1.3											
[9]	0.8											
[2]	0.7											
1.5												
[2]												
9												
2												
11												

(Continued)

UNCLASSIFIED

Fact Sheet: T-43 MN-3150 NAVSTAR GLOBAL POSITIONING SYSTEM  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							9	1.1
KITS NONRECUR							2	1.3
EQUIPMENT							[9]	0.8
EQUIP NONREC							[2]	0.7
CHANGE ORDERS								
DATA								1.5
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-95 2 KITS							[2]	
FY-97 9 KITS							[9]	1.3
TOTAL INSTALL							11	1.3
TOTAL COST (BP-1100)							11	6.7
(Totals may not add due to rounding)								

Method of Implementation: DEPOT FIELD TEAM  
Initial Lead Time: 24 Months  
Follow-On Lead Time: 24 Months

Milestones

	FY-95	FY-96	FY-97	FY-98	FY-99
Contract Date (Month/CY)	02/95	02/96	02/97		
Delivery Date (Month/CY)	02/97	01/99			

Installation Schedule

	FY-95	FY-96	FY-97	FY-98	FY-99
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input			1 1 1 1	2 2 2 2	2 2 2 2
Output					3 3 3 3

AIRCRAFT

**Description/Justification**

**Service Bulletins** are issued to correct manufacturer identified deficiencies and are required to maintain FAA certification.

**Aircraft Breakdown:** Active 11, Reserve 0, ANG 0

### Development Status

**As required.**

### **Projected Financial Plan**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)						
PROCUREMENT (3010)						
INSTALL KITS						
KITS NONRECUR						
EQUIPMENT						
EQUIP NONREC						
CHANGE ORDERS						
DATA						
SIM/TRAINER						
SUPPORT-EQUIP						
TOTAL COST (BP-1100)	1.2	0.4	0.7	0.3	0.2	0.2
(Totals may not add due to rounding)	1.2	0.4	0.7	0.3	0.2	0.2



(Continued)

UNCLASSIFIED

Fact Sheet: T-43 MN-99999S SERVICE BULLETINS  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP	1.7	1.3		5.9
TOTAL COST (BP-1100)	1.7	1.3		5.9
(Totals may not add due to rounding)				

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-92

Contract Date (Month/CY)

Delivery Date (Month/CY)



		FY-04		FY-05		TO COMP		TOTAL	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)									
PROCUREMENT (3010)									
INSTALL KITS		3	1.6					6	2.8
KITS NONRECUR				3	0.8			5	5.1
EQUIPMENT		[3]	1.2	[3]	0.5			[6]	1.7
EQUIP NONREC								[2]	1.7
CHANGE ORDERS									
DATA									1.5
SIM/TRAINER			0.7						
SUPPORT-EQUIP									
OGC			0.1						0.1
INSTALLATION OF HARDWARE									
FY-01	2 KITS							[2]	
FY-02	3 KITS							[3]	
FY-03	0 KITS							[6]	1.5
FY-04	3 KITS	[3]		[3]	1.5				
FY-05	3 KITS								
TOTAL INSTALL		3	3.7	3	2.9			11	14.5
TOTAL COST (BP-1100)		3	3.7	3	2.9			11	14.5

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 15 Months Follow-On Lead Time: 11 Months

**Milestones**

Contract Date (Month/CY)  
 Delivery Date (Month/CY)

FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
		03/01	12/02	12/02	12/03	
		06/02	09/03	09/03	09/04	

**Installation Schedule**

	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
Quarters	1	2	3	4	1	2	3
Input							
Output							

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)										DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications					P-1 ITEM NOMENCLATURE: KC-10					
	1999	2000	2001	2002	2003	2004	2005			
COST (In Mil)	\$38.306	\$38.585	\$55.370	\$46.186	\$32.075	\$5.021	\$3.748			

This line item funds modifications to the KC-10 aircraft. The three engine KC-10 serves a dual-role by providing both air refueling and strategic airlift support. The aircraft provides air refueling by using both the boom and drogue methods and can carry up to 27 standard 463-L pallets. The primary modification budgeted in FY01 is the Global Air Traffic Management (GATM). Other modifications are budgeted to enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

MOD CLASS P-S	NR 99999A	MODIFICATION TITLE LOW COST SAFETY MO	FY-99 0.1	FY-00 0.1	FY-01 0.1	FY-02 0.1	FY-03 0.1	FY-04 0.1	FY-05 0.1	COST IO GO	TOTAL PROG. 0.8
TOTAL FOR CLASS P-S											
P	3149T2	TCAS AND TAWS	14.4	16.6	4.6		0.1	0.1	0.1	0.0	0.8
	3150	NAVSTAR GLOBAL POS	4.3	2.5							41.9
	4369	REPLACE PYLONS 1&3	2.3	4.3	2.3	1.1	0.8				68.2
	9702	8.33 KHZ VHF RADIO	0.1								14.1
	9709	GLOBAL AIR TRAFFIC	0.6		36.2	30.0	19.8				2.1
	9709B	AUTOMATED DEPENDE						3.0	1.7		86.6
	99999S	SERVICE BULLETTINS	3.6	3.9	2.9	1.2	1.8	1.9	1.9		4.8
	99999X	LOW COST MODIFICATI	0.1	0.1	0.1	0.1	0.1	0.1	0.1		37.9
	DC101	FM IMMUNITY		2.4	1.6						3.6
	SIM-10	SIMULATOR UPGRADE	12.2	6.4	7.6	13.7	9.6				4.0
	Z88888	REPROGRAMMINGS	0.7	2.4							61.2
TOTAL FOR CLASS P											
			38.4	38.5	55.3	46.2	32.1	5.0	3.7	0.0	327.6
TOTAL FOR AIRCRAFT KC-10											
			38.5	38.6	55.4	46.3	32.2	5.1	3.8	0.0	328.4

Totals may not add due to rounding.

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02/15/2000

FY 2001 PBR

Modification Title and No: TCAS AND TAWS MN-3149T2

Models of Aircraft Affected: KC-10

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: KC-10

PE 0401219F Team MOBIL

### Description/Justification

This Navigation/Safety mod satisfies requirements of both Traffic Alerting and Collision Avoidance Systems (TCAS) and Terrain Avoidance Warning system (TAWS). Traffic Alerting and Collision Avoidance Systems (TCAS Mode S) - Produces resolution advisory (RA) directing an aircraft maneuver, thus ensuring altitude separation at the closest point of approach. Displays a basic radar like picture of other transponder equipped aircraft's location and altitude relative to yours. The MODE S portion is an airborne digital data link which permits selective interrogation. Growth capability to Enhanced TCAS for station keeping formation flying.

Terrain Avoidance Warning System (TAWS) increases crew awareness by providing warning of surrounding terrain. TAWS Terrain display capability to be implemented during GATM. Using an existing navigation system, such as GPS, the aircraft's position is correlated with a database-driven terrain map which provides the pilot with real time awareness of the aircraft's position. Includes modification for 4 simulators and 2 cockpit procedural trainers (FY98/99). Subsequent to the Hon Ron Brown accident, OSD directed program acceleration to complete NLT FY01.

Aircraft Breakdown: Active 59, Reserve 0, ANG 0

### Development Status

N/A

### Projected Financial Plan

RDT&E (3600)

#### PROCUREMENT (3010)

INSTALL KITS  
KITS NONRECUR  
EQUIPMENT  
EQUIP NONREC  
CHANGE ORDERS  
DATA  
SIM/TRAINER  
SUPPORT-EQUIP  
OGC

PRIOR QTY	COST	FY-99 QTY	COST	FY-00		FY-01		FY-02		FY-03	
				QTY	COST	QTY	COST	QTY	COST	QTY	COST

6	0.6	26	2.8	27	3.2						
[6]	1.6		0.3		0.3						
	1.3	[26]	5.3	[27]	6.7						
	2.0		0.9		0.6						
					0.7						
[1]	0.2		4.7		0.4						
	0.6	[4]			0.0						
	0.0		0.0		0.0						

#### INSTALLATION OF HARDWARE

FY-98 6 KITS  
FY-99 26 KITS  
FY-00 27 KITS

		2	0.5	30	4.8	[27]	4.6				
						27	4.6				

TOTAL INSTALL

TOTAL COST (BP-1100)

6	6.3	26	14.4	27	16.6		4.6				
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(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: KC-10 MN-3149T2 TCAS AND TAWS  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RD&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			59	6.6
KITS NONRECUR				2.2
EQUIPMENT			[59]	13.3
EQUIP NONREC				2.9
CHANGE ORDERS				0.6
DATA				0.8
SIM/TRAINER			[5]	5.3
SUPPORT-EQUIP				0.4
OGC				0.0
INSTALLATION OF HARDWARE				
FY-98 6 KITS			[6]	1.3
FY-99 26 KITS			[26]	3.9
FY-00 27 KITS			[27]	4.6
TOTAL INSTALL			59	9.8
TOTAL COST (BP-1100)			59	41.9
(Totals may not add due to rounding)				

Method of Implementation: CLS

Initial Lead Time: 12 Months

Follow-On Lead Time: 9 Months

**Milestones**

	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	06/98	01/99	01/00	
Delivery Date (Month/CY)	06/99	10/99	10/00	

**Installation Schedule**

	FY-98	FY-99	FY-00	FY-01
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input		1	1 7 8	7 7 7 6
Output		3	7 8 8	7 7 7 7

02/15/2000

FY 2001 PBR

Modification Title and No: NAVSTAR GLOBAL POSITIONING SYSTEM MN-3150

Models of Aircraft Affected: ALL

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: KC-10 Class P

PE 0401219F Team MOBIL

**Description/Justification**

This Navigation and Safety mod is a space based radio navigation system that will provide suitably equipped host vehicles with highly accurate, jam-resistant, three dimensional position, velocity, and time data, worldwide in all weather to improve mission effectiveness. Modification also includes FMS-800 flight management system for GPS integration and electronic horizontal situation indicator (EHSI) for improved situational awareness. FY95-97 kits not installed until FY98-00 due to FAA certification delays. FY97 Sim/Trainer funds upgrade all training devices and courseware to A1C1 configuration. FY98 software integration required for AF Mission Support Sys (AFMSS) software changes.

Aircraft Breakdown: Active 59, Reserve 0, ANG 0

**Development Status**

N/A.

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

	PRIOR QTY	COST	FY-99 QTY	COST	FY-00 QTY	COST	FY-01 QTY	COST	FY-02 QTY	COST	FY-03 QTY	COST
INSTALL KITS	59	14.6										
KITS NONRECUR		1.0										
EQUIPMENT	[59]	13.7										
EQUIP NONREC		7.0										
CHANGE ORDERS		1.2										
DATA		3.7										
SIM/TRAINER	[6]	13.0										
SUPPORT-EQUIP		1.1										
OGC		0.3										
SOFTWARE		1.5										
INSTALLATION OF HARDWARE												
FY-94 1 KITS	[1]	0.5										
FY-95 17 KITS	[17]	3.5										
FY-96 18 KITS	[1]	0.2	[17]	3.1								
FY-97 23 KITS			[7]	1.3	[16]	2.5						
TOTAL INSTALL	19	4.2	24	4.3	16	2.5						
TOTAL COST (BP-1100)	59	61.4		4.3		2.5						

(Totals may not add due to rounding)



		FY-04	FY-05	TO COMP	TOTAL
		QTY	QTY	QTY	QTY
		COST	COST	COST	COST
RDT&E (3600)					
PROCUREMENT (3010)					
INSTALL KITS					
KITS NONRECUR					
EQUIPMENT					
EQUIP NONREC					
CHANGE ORDERS					
DATA					
SIM/TRAINER					
SUPPORT-EQUIP					
OGC					
SOFTWARE					
INSTALLATION OF HARDWARE					
FY-94	1 KITS				
FY-95	17 KITS				
FY-96	18 KITS				
FY-97	23 KITS				
TOTAL INSTALL					
TOTAL COST (BP-1100)					

(Totals may not add due to rounding)

### Method of Implementation: CLS

**Initial Lead Time: 12 Months**

**Follow-On Lead Time: 21 Months**

## **Milestones**

	<u>FY-94</u>	<u>FY-95</u>	<u>FY-96</u>	<u>FY-97</u>	<u>FY-98</u>	<u>FY-99</u>	<u>FY-00</u>
Contract Date (Month/CY)	03/94	03/95	03/96	03/97			
Delivery Date (Month/CY)	03/95	12/96	12/97	12/98			

## **Installation Schedule**

	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input		1					
Output					1 1 1 4	6 6 6 6	6 6 6 5

FY 2001 PBR

**Models of Aircraft Affected: KC-10A**

Center: OC-ALC - Tinker AFB Okla City, OK

## MODIFICATION OF AIRCRAFT

**Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: KC-10 Class P**

PE 0401219F Team MOBIL

Replacement of the KC-10 wing engine pylon with an improved updated engine mount truss fitting less prone to stress cracking. (Ref: AIRWORTHINESS DIRECTIVE 91-07-15, ALERT SERVICE BULLETIN 54-99). If not corrected, cracks could result in loss of structural integrity of the wing forward mount truss fitting and eventual separation of the engine. Fourteen aircraft completed prior to FY98 were paid for with Service Bulletin funds.

**Aircraft Breakdown:** Active 45, Reserve 0, ANG 0

## N/A

### **Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
<b>RDT&amp;E (3600)</b>												
<b>PROCUREMENT (3010)</b>												
INSTALL KITS	12	2.7	11	2.3	14	3.1	8	1.3				
KITS NONRECUR		0.7										
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
<b>SUPPORT-EQUIP</b>												
<b>INSTALLATION OF HARDWARE</b>												
FY-98 12 KITS					[12]	1.2						
FY-99 11 KITS							[11]	1.0				
FY-00 14 KITS									[14]	1.1		
FY-01 8 KITS											[8]	0.8
TOTAL INSTALL												
					12	1.2	11	1.0	14	1.1	8	0.8
TOTAL COST (BP-1100)	12	3.3	11	2.3	14	4.3	8	2.3		1.1		0.8
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED  
Fact Sheet: KC-10 MN-4369 REPLACE PYLONS 1&3 FORWARD MOUNT TRUSS ASSEMBLIE  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RD&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					45	9.3		
KITS NONRECUR						0.7		
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-98 12 KITS							[12]	1.2
FY-99 11 KITS							[11]	1.0
FY-00 14 KITS							[14]	1.1
FY-01 8 KITS							[8]	0.8
TOTAL INSTALL							45	4.1
TOTAL COST (BP-1100)							45	14.1
(Totals may not add due to rounding)								

Method of Implementation: CLS

Initial Lead Time: 21 Months

Follow-On Lead Time: 24 Months

**Milestones**

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)	03/98	12/98	12/99	12/00		
Delivery Date (Month/CY)	12/99	12/00	12/01	12/02		

**Installation Schedule**

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input			3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3
Output			3 3 3 3	3 3 3 3	3 3 3 3	3 3 3 3

02/15/2000

FY 2001 PBR

Modification Title and No: GLOBAL AIR TRAFFIC MANAGEMENT (GATM) MN-9709

Models of Aircraft Affected: KC-10

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: KC-10

PE 0401219F Team MOBIL

**Description/Justification**

Global Air Traffic Management (GATM) is based upon evolving Communication, Navigation and Surveillance (CNS) and Free Flight concepts and requirements. Key elements of its architecture are Dual MMR (Multi-Mode Receiver), Dual CMU (Communications Management Unit), Communication Datalinks (HF, VHF, SATCOM), and associated avionics components and wiring. Communications upgrades include a data link to augment/replace voice communications. The navigation capabilities include a fully integrated GPS and an advanced flight management system. The surveillance capabilities include automatic aircraft position reporting (both enroute and oceanic). Modification includes 1 Weapon System Trainer (WST) simulator and 2 Cockpit Procedural Trainers (CPT) (FY01/03). FY03 leadtime reduced to 9 months due to system maturity. Internal Air Force review of program in 3rd Quarter of FY99 realized shift of 3010 to 3600 funds appropriate for magnitude of effort. Additional money will be added in outyears to complete all 59 aircraft, 4 WSTs, and 2 CPTs.

Aircraft Breakdown: Active 33, Reserve 0, ANG 0

**Development Status**

Contract Award expected 2Q/FY00.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)			1	9.5		23.6		19.7				
PROCUREMENT (3010)												
INSTALL KITS					10	5.0	17	8.3	5	2.6		
KITS NONRECUR												
EQUIPMENT					[10]	13.1	[17]	16.6	[5]	5.1		
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER					[2]	12.9			[1]	0.5		
SUPPORT-EQUIP						0.1						
TRAINER PECULIAR						5.1						
OGC						0.6						
INSTALLATION OF HARDWARE												
FY-99 1 KITS					[1]							
FY-01 10 KITS							[10]	5.1				
FY-02 17 KITS									[17]	8.7		
FY-03 5 KITS									[5]	2.7		
TOTAL INSTALL					1		10	5.1	22	11.4		
TOTAL COST (BP-1100)			1	0.6		36.2	17	30.0	5	19.8		

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: KC-10 MN-9709 GLOBAL AIR TRAFFIC MANAGEMENT (GATM)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)					1	52.8		
PROCUREMENT (3010)								
INSTALL KITS					32	15.9		
KIT'S NONRECUR								
EQUIPMENT					[32]	34.8		
EQUIP NONREC								
CHANGE ORDERS								
DATA						0.2		
SIM/TRAINER					[3]	13.4		
SUPPORT-EQUIP						0.1		
TRAINER PECULIAR						5.1		
OGC						0.6		
INSTALLATION OF HARDWARE								
FY-99					[1]			
1 KITS								
FY-01					[10]	5.1		
10 KITS								
FY-02					[17]	8.7		
17 KITS								
FY-03					[5]	2.7		
5 KITS								
TOTAL INSTALL					33	16.5		
TOTAL COST (BP-1100)					33	86.6		

(Totals may not add due to rounding)

Method of Implementation: CLS

Initial Lead Time: 18 Months

Follow-On Lead Time: 12 Months

Milestones

FY-04

Contract Date (Month/CY) 03/99 12/99 12/00 12/01 12/02 06/03

FY-99

Contract Date (Month/CY) 09/00 12/00 12/01 12/02 12/03 06/03

Installation Schedule

	FY-99		FY-00		FY-01		FY-02		FY-03		FY-04	
Quarters	1	2	3	4	1	2	3	4	1	2	3	4
Input												
Output												

02/15/2000

FY 2001 PBR

Modification Title and No: SERVICE BULLETINS MN-99999S

Models of Aircraft Affected: KC-10

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: KC-10

Center: OC-ALC - Tinker AFB Okla City, OK

PE 0401219F Team MOBIL

# Description/Justification

These funds pay for Service Bulletins (SBs), Airworthiness Directives (ADs), and All Operator Letters (AOLs) issued to correct identified deficiencies, provide product improvements, and incorporate aging aircraft and FAA certification requirements. Some of the major requirements included the installation of modified fuel gauges (FY97-99); main landing gear trunnion bolt replacement in FY98-99; replacement of the MA-3 refueling assembly, stowage tube modification, and in FY99-00 the inspection/replacement of inboard flap track fasteners and pins on the trailing edge of the wings.

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

## Development Status

N/A

## Projected Financial Plan

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

AIRCRAFT

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
	20.5	3.6	3.9	2.9	1.2	1.8
TOTAL COST (BP-1100)	20.5	3.6	3.9	2.9	1.2	1.8

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: KC-10 MN-99999S SERVICE BULLETINS  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
AIRCRAFT	1.9		1.9					37.9
TOTAL COST (BP-1100)	1.9		1.9					37.9
(Totals may not add due to rounding)								

Method of Implementation:

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

Milestones

FY-92

Contract Date (Month/CY)  
Delivery Date (Month/CY)

02/15/2000

FY 2001 PBR

Modification Title and No: FM IMMUNITY MN-DC101

Models of Aircraft Affected:

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: KC-10

PE 0401219F Team MOBIL

**Description/Justification**

This is not a New Start. FY00 funding for effort resulted from a Congressional Appropriations Committee plus-up for GATM efforts, one of which is FM Immunity. This modification provides protection from interference in the FM broadcast band adjacent to the aeronautical radio navigation band. This modification effort will reduce/eliminate the number of non-compliant aircraft and reduce the increased operational risk and operational restrictions placed on non-compliant aircraft by host nations.

Aircraft Breakdown: Active 59, Reserve 0, ANG 0

**Development Status**

N/A

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

PRIOR	FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
			35	2.4	24	1.6				
			35	2.4	24	1.6				



(Continued)

UNCLASSIFIED

Fact Sheet: KC-10 MN-DC101 FM IMMUNITY  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KIT'S NONRECUR				
EQUIPMENT			59	4.0
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
TOTAL COST (BP-1100)			59	4.0
(Totals may not add due to rounding)				

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-00	FY-01
Contract Date (Month/CY)	02/00	02/01
Delivery Date (Month/CY)	08/00	08/01

Center: OO-ALC - Hill AFB, UT

Fact Sheet: KC-10 MN-SIM-10 SIMULATOR UPGRADE (KC-10)  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR							6	14.2
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.7
SIM/TRAINER							[10]	11.6
SUPPORT-EQUIP								0.2
OGC								2.4
TRAINER PECULIAR								9.2
INSTALLATION OF HARDWARE								3.6
FY-98 1 KITS							[1]	
FY-99 1 KITS							[1]	
FY-00 1 KITS							[1]	4.9
FY-01 1 KITS							[1]	5.5
FY-02 1 KITS							[1]	4.2
FY-03 1 KITS							[1]	4.7
TOTAL INSTALL							6	32.1
TOTAL COST (BP-1100)							6	61.2
(Totals may not add due to rounding)								

### Method of Implementation: CLS

**Initial Lead Time: 12 Months**

**Follow-On Lead Time: 9 Months**

## Milestones

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)								09/99	06/00	06/01	06/02	06/03
Delivery Date (Month/CY)								09/00	03/01	03/02	03/03	03/04

## Installation Schedule

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input								
Output								1
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input		1	2	1				
Output	1							

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: C-12				
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005
	\$2.772	\$6.332	\$1.521	\$0.409	\$0.402	\$0.408	\$0.417

This line item funds modifications to the C-12 aircraft, commercial equivalent Beech Craft Super King Air. The C-12 is a twin-turboprop, support-airlift aircraft used to transport cargo and passengers. The primary modification budgeted in FY01 is the Terrain Awareness Warning System (TAWS). Other modifications are budgeted to enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

CLASS P	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG. 13.1
	3149F	FLIGHT DATA RECORD	1.5								
	99999S	SERVICE BULLETINS	0.1	0.5	0.1	0.3	0.3	0.3	0.3		3.1
	99999X	LOW COST MODIFICATI	0.1	0.1	0.1	0.1	0.1	0.1	0.1		1.5
	TAWS	TERRAIN AWARENESS	1.0	5.4	1.4						7.8
	Z88888	REPROGRAMMINGS	0.1	0.4							1.0
TOTAL FOR CLASS P			2.8	6.3	1.6	0.4	0.4	0.4	0.4	0.0	26.4
TOTAL FOR AIRCRAFT C-12			2.8	6.3	1.6	0.4	0.4	0.4	0.4	0.0	26.4

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 50	PAGE NO. 1
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02/15/2000  
 FY 2001 PBR  
 Modification Title and No: FLIGHT DATA RECORDER & COCKPIT VOICE RECORDER MN-3149F  
 Models of Aircraft Affected: C-12, DV AIRCRAFT  
 Center: OC-ALC - Tinker AFB Okla City, OK  
 UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT  
 Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: C-12  
 PE 0401314F  
 Team MOBIL

**Description/Justification**

The Navigation and Safety Upgrade program combines the C-12 Navigation and Safety upgrades on Air Force aircraft designated for DV passenger missions. The Flight Data Recorder and the Cockpit Voice Recorder will provide a valuable aid in providing post-mishap information concerning the pre-mishap pilot actions and aircraft system status. The modification is IA W SECDEF 26 Apr 96 letter requiring 'navigation and safety upgrades for the Operational Support Airlift (OSA), Defense Attache and Security Assistance aircraft.' The Flight Data Recorder is a Loral Fairchild F1000 and the Cockpit Voice Recorder is a Loral Fairchild A100S. The TCAS I system is a Bendix King CAS 66A system. This mod is baselined with 3149T, TCAS. FY96 funds apply to two unique C-12C models. FY97 funds apply to 1 ea C-12F prototype and 1 C-12 F kitproof, C-12J prototype, as well as production kit buys. (May 99) Supplemental kit required for installation (pedestal and shelf assembly) - design in work. Production installs scheduled to begin early FY00.

Aircraft Breakdown: Active 28, Reserve 0, ANG 0

**Development Status**

N/A.

**Projected Financial Plan**

	PRIOR	FY-99		FY-00		FY-01		FY-02		FY-03	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)											
PROCUREMENT (3010)											
INSTALL KITS	26	0.6									
KITS NONRECUR	5	2.2									
EQUIPMENT	[26]	5.0									
EQUIP NONREC	[5]	1.2									
CHANGE ORDERS		1.6									
DATA		0.6			0.0						
SIM/TRAINER											
SUPPORT-EQUIP		0.2									
TOOLING		0.1			0.0						
OGC											
INSTALLATION OF HARDWARE											
FY-96 2 KITS	[2]										
FY-97 27 KITS	[1]				1.5	[3]		[7]			
FY-98 2 KITS						[2]					
TOTAL INSTALL	3				1.5	5		7			
TOTAL COST (BP-1100)	31	11.5			1.5						

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-12 MN-3149F FLIGHT DATA RECORDER & COCKPIT VOICE RECORDER

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					26	0.6		
KITS NONRECUR					5	2.2		
EQUIPMENT					[26]	5.0		
EQUIP NONREC					[5]	1.2		
CHANGE ORDERS						1.6		
DATA						0.6		
SIM/TRAINER								
SUPPORT-EQUIP								
TOOLING						0.2		
OGC						0.1		
INSTALLATION OF HARDWARE								
FY-96 2 KITS					[2]			
FY-97 27 KITS					[11]	1.5		
FY-98 2 KITS					[2]			
TOTAL INSTALL					15	1.5		
TOTAL COST (BP-1100)					31	13.1		

(Totals may not add due to rounding)

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 12 Months

Follow-On Lead Time: 6 Months

Milestones

	FY-96	FY-97	FY-97	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	09/96	09/97	01/98	01/98	01/99		
Delivery Date (Month/CY)	09/97	03/98	07/98	07/99			

Installation Schedule

	FY-96	FY-97	FY-97	FY-98	FY-99	FY-00	FY-01
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input				2 1	1 1	1 1	3 7
Output				2 1			

02/15/2000

FY 2001 PBR

Modification Title and No: TERRAIN AWARENESS &amp; WARNING SYS (TAWs) MN-TAWs

Models of Aircraft Affected: C-12

## UNCLASSIFIED

## MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-12 Class P

PE 0401314F Team MOBIL

**Description/Justification**

This Nav/Safety Terrain Awareness & Warning Sys (TAWs) mod (formerly called Enhanced Ground Proximity Warning System (EGPWS), has been plussed-up by the FY00 Congressional Appropriations Committee. TAWs will install the equipment to provide ground warnings, terrain display, and terrain data base look ahead protection. TAWs prototypes are required for C-12C/D, F, and J. Prototype installation costs are included in the kit cost IAW contractor practices. Note: 2 ea C-12C's retired from fleet 1 Oct 99. An additional C-12C will be excessed in FY00. Fleet size changed from 31 to 28.

Aircraft Breakdown: Active 28, Reserve 0, ANG 0

**Development Status**

N/A

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

INSTALL KITS  
KITS NONRECUR  
EQUIPMENT  
EQUIP NONREC  
CHANGE ORDERS  
DATA  
SIM/TRAINER  
SUPPORT-EQUIP  
OGC

**INSTALLATION OF HARDWARE**

FY-99 1 KITS  
FY-00 3 KITS  
FY-01 1 KITS  
TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
1			1	0.9	3	4.9	1	0.5				
							[1]	0.1				
						0.0		0.1				
				0.0				0.1				
								0.1				
				0.1		0.5		0.2				
					[1]							
					[3]							
					4		[1]	0.5				
							1	0.5				
	1	1.0	3	5.4	1	1.4						



(Continued)

UNCLASSIFIED

Fact Sheet: C-12 MN-TAWS TERRAIN AWARENESS & WARNING SYS (TAWs)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							5	6.2
KITS NONRECUR								
EQUIPMENT							[1]	0.1
EQUIP NONREC								0.1
CHANGE ORDERS								0.1
DATA								
SIM/TRAINER								0.1
SUPPORT-EQUIP								0.8
OGC								
INSTALLATION OF HARDWARE								
FY-99 1 KITS							[1]	
FY-00 3 KITS							[3]	
FY-01 1 KITS							[1]	0.5
TOTAL INSTALL							5	0.5
TOTAL COST (BP-1100)							5	7.8
(Totals may not add due to rounding)								

Method of Implementation: CLS

Initial Lead Time: 12 Months

Follow-On Lead Time: 6 Months

Milestones

	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	11/98	11/99	11/00	
Delivery Date (Month/CY)	11/99	05/00	05/01	

Installation Schedule

	FY-99		FY-00		FY-01		FY-02	
Quarters	1	2	3	4	1	2	3	4
Input								
Output								

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**BUDGET ITEM JUSTIFICATION  
(EXHIBIT P-40)**

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		P-1 ITEM NOMENCLATURE: C-18					DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications							
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005
	\$0.350	\$0.337	\$0.345	\$0.823	\$0.805	\$0.816	\$0.834

This line item funds modifications to the C-18 aircraft. The C-18, a modified Boeing 707, is a long range, four engine, jet transport aircraft. The C-18 is used to support Space and Missile Missions. The overall goal of modifications budgeted in FY01 is to fund service bulletins necessary for FAA certification while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
P	99999S	SERVICE BULLETINS	0.2	0.2	0.3	0.7	0.7	0.7	0.7		3.8
	99999X	LOW COST MODIFICATI	0.1	0.1	0.1	0.1	0.1	0.1	0.1		5.0
	Z88888	REPROGRAMMINGS	0.1	0.1							0.1
TOTAL FOR CLASS P			0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.0	8.8
TOTAL FOR AIRCRAFT C-18			0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.0	8.8

**Totals may not add due to rounding.**

Totals may not add due to rounding.		P-1 SHOPP LIST ITEM NO. 51	PAGE NO. 1
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**BUDGET ITEM JUSTIFICATION  
(EXHIBIT P-40)**

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)		DATE February 2000					
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications		P-1 ITEM NOMENCLATURE: C-20					
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005
	\$6.464	\$5.393	\$5.235	\$9.181	\$6.368	\$2.428	\$0.485

This line item funds modifications to the C-20 aircraft, commercial equivalent Gulfstream III/IV. The C-20 aircraft is a twin-engine, turbofan aircraft used to airlift DoD officials and high-ranking government personnel over long distances (3,000 miles and greater). The primary modification budgeted in FY01 is the Terrain Awareness and Warning System (TAWS). Other modifications are funded to enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
P	3149T	TRAFFIC ALERT & COL	1.7								3.3
	3150	NAVSTAR GLOBAL POS	2.5								17.2
	9709	GLOBAL AIR TRAFFIC				8.6	5.5	1.9			16.0
	99999S	SERVICE BULLETINS	0.3	0.3	0.4	0.4	0.6	0.4	0.4		5.0
	99999X	LOW COST MODIFICATI	0.1	0.1	0.3	0.2	0.3	0.1	0.1		4.5
	TAWS	TERRAIN AWARENESS	1.7	4.7	4.6						12.6
	Z88888	REPROGRAMMINGS	0.1	0.3							0.4
TOTAL FOR CLASS P			6.5	5.4	5.2	9.2	6.4	2.4	0.5	0.0	59.0
TOTAL FOR AIRCRAFT C-20			6.5	5.4	5.2	9.2	6.4	2.4	0.5	0.0	59.0

**Totals may not add due to rounding.**

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02/15/2000

FY 2001 PBR

Modification Title and No: TRAFFIC ALERT &amp; COLLISION AVOIDANCE SYSTEM MN-3149T

Models of Aircraft Affected: C-20, DV AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-20

PE 0401314F Team MOBIL

**Description/Justification**

This Nav/Safety mod installs a Traffic Alert and Collision Avoidance System (TCAS) II with mode 'S.' It will provide a visual and aural warning for conflicting air traffic and provides a visual display for corrective action. FAA mandated all passenger aircraft be modified with TCAS. This modification will install TCAS on the USAF C-20A/B models. This mod is baselined with GPS/TCAS installation concurrently (except 2 C-20H models which have TCAS installed) due to aircraft availability. Two prototype kits (C-20A, C-20B) FY98 installation cost is included in the kit cost IAW contractor practices.

Aircraft Breakdown: Active 8, Reserve 0, ANG 0

**Development Status**

N/A.

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

INSTALL KITS

KITS NONREC

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

OGC

**INSTALLATION OF HARDWARE**

FY-96 2 KITS

FY-98 2 KITS

FY-99 4 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
4	0.2	4	0.3			
[4]	0.3	[4]	0.6			
	0.6					
	0.3		0.0			
	0.0		0.0			
[2]	0.1	[1]	0.1			
[1]	0.1	[4]	0.7			
3	0.1	5	0.8			
4	1.6	4	1.7			

(Continued)

Fact Sheet: C-20 MN-3149T TRAFFIC ALERT & COLLISION AVOIDANCE SYSTEM UNCLASSIFIED

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					8		8	0.5
KITS NONRECUR								0.3
EQUIPMENT					[8]			1.2
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.3
SIM/TRAINER								
SUPPORT-EQUIP								
OGC								0.0
INSTALLATION OF HARDWARE								
FY-96 2 KITS							[2]	
FY-98 2 KITS							[2]	0.2
FY-99 4 KITS							[4]	0.7
TOTAL INSTALL							8	0.9
TOTAL COST (BP-1100)							8	3.3

(Totals may not add due to rounding)

Method of Implementation: CLS

Initial Lead Time: 24 Months Follow-On Lead Time: 3 Months

Milestones

Contract Date (Month/CY)	FY-96	FY-97	FY-98	FY-99	FY-00
Delivery Date (Month/CY)	12/95	12/97	12/98	12/99	

Installation Schedule

	FY-96	FY-97	FY-98	FY-99	FY-00
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input					
Output					

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: NAVSTAR GLOBAL POSITIONING SYSTEM MN-3150  
 Models of Aircraft Affected: C-20

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: C-20  
 PE 0401314F Team MOBIL

Center: OC-ALC - Tinker AFB Okla City, OK

**Description/Justification**  
 The modification will install two fully integrated NAVSTAR Global Positioning System (GPS) P-Y code units, to comply with ICAO and OSD requirements. Mods are baselined to install GPS and TCAS modification concurrently (except 2 C-20H models which have TCAS installed) due to aircraft availability. Three separate prototypes (FY96) are required to certify C-20A, B, and H models. The FY96 kit cost included the funding for the installation of the three prototypes which will occur in FY98. Kit costs are most (A model), intermediate (B-model), and least (H-model) due to age of aircraft avionics suite.

Aircraft Breakdown: Active 10, Reserve 0, ANG 0

**Development Status**  
 N/A

**Projected Financial Plan**

RDT&E (3600)

**PROCUREMENT (3010)**

INSTALL KITS  
 KITS NONRECUR  
 EQUIPMENT  
 EQUIP NONREC  
 CHANGE ORDERS  
 DATA  
 SIM/TRAINER  
 SUPPORT-EQUIP  
 OGC

PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST

5	3.5	5	1.0								
[5]	5.4										
	4.3	[5]	1.0								
	1.2										
	0.3										

**INSTALLATION OF HARDWARE**

FY-96 3 KITS  
 FY-98 2 KITS  
 FY-99 5 KITS  
 TOTAL INSTALL

[3]											
		[2]	0.1								
		[5]	0.4								
3		7	0.5								

TOTAL COST (BP-1100)

5	14.7	5	2.5								
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(Totals may not add due to rounding)



(Continued)

UNCLASSIFIED

Fact Sheet: C-20 MN-3150 NAVSTAR GLOBAL POSITIONING SYSTEM

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					10	4.5		
KITS NONRECUR						5.4		
EQUIPMENT					[10]	5.3		
EQUIP NONREC								
CHANGE ORDERS								
DATA						1.2		
SIM/TRAINER								
SUPPORT-EQUIP								
OGC						0.3		
INSTALLATION OF HARDWARE								
FY-96 3 KITS					[3]			
FY-98 2 KITS					[2]	0.1		
FY-99 5 KITS					[5]	0.4		
TOTAL INSTALL					10	0.5		
TOTAL COST (BP-1100)					10	17.2		
(Totals may not add due to rounding)								

Method of Implementation: CLS

Initial Lead Time: 24 Months

Follow-On Lead Time: 3 Months

**Milestones**

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
Contract Date (Month/CY)	03/96	12/97	03/98	12/98	03/99	
Delivery Date (Month/CY)						

**Installation Schedule**

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input						
Output						

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: TERRAIN AWARENESS & WARNING SYS (TAWWS) MN-TAWS  
 Models of Aircraft Affected: C-20 A/B/H  
 Center: OC-ALC - Tinker AFB Okla City, OK  
 UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT  
 Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: C-20  
 PE 0401314F  
 Team MOBIL

**Description/Justification**  
 This Nav/Safety mod installs a Terrain Avoidance Warning System (TAWWS) will install an enhanced MK-V EGPWS (Allied Signal) to provide ground warnings, terrain display, and terrain database look-ahead protection. Three separate prototypes are required to certify C-20A, B, and H models. The FY98 kits non-recurring is for the H-model prototype & the FY99-00 Kits non-recurring is for the A/B prototypes, respectively. The prototype kit installation cost is included in the kit cost IAW contractor practices. Kit costs are most (A model), intermediate (B-model), and least (H-model) due to age of aircraft avionics suite.

Aircraft Breakdown: Active 10, Reserve 0, ANG 0

**Development Status**  
 N/A.

**Projected Financial Plan**

RDT&E (3600)									
PROCUREMENT (3010)	PRIOR QTY	COST		FY-99		FY-00		FY-01	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST
INSTALL KITS	2	0.1				2	0.1	6	0.4
KITS NONRECUR		0.7					2.0		
EQUIPMENT	[2]	0.9				[2]	1.0	[6]	3.8
EQUIP NONREC									
CHANGE ORDERS									
DATA					0.9		1.0		
SIM/TRAINER					0.8		0.6		
SUPPORT-EQUIP									
INSTALLATION OF HARDWARE									
FY-98 2 KITS				[2]					
FY-00 2 KITS						[2]		[6]	0.4
FY-01 6 KITS								6	0.4
TOTAL INSTALL				2		2		6	
TOTAL COST (BP-1100)	2	1.7			1.7	2	4.7	6	4.6

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-20 MN-TAWS TERRAIN AWARENESS & WARNING SYS (TAWS)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					10	0.6		
KITS NONRECUR						2.8		
EQUIPMENT					[10]	5.7		
EQUIP NONREC								
CHANGE ORDERS								
DATA						1.9		
SIM/TRAINER								
SUPPORT-EQUIP						1.3		
INSTALLATION OF HARDWARE								
FY-98 2 KITS					[2]			
FY-00 2 KITS					[2]			
FY-01 6 KITS					[6]	0.4		
TOTAL INSTALL					10	0.4		
TOTAL COST (BP-1100)					10	12.6		

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 12 Months

Follow-On Lead Time: 6 Months

Milestones

	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	06/98	12/99	12/00	12/01	
Delivery Date (Month/CY)	06/99	06/00	06/01	06/02	

Installation Schedule

	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4
Input		2	1	2	2
Output			1	1	2

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: VC-25A			
	1999	2000	2001	2002	2003	2004
						2005
COST (In Mil)	\$7.331	\$9.102	\$0.098	\$1.435	\$0.098	\$0.949
						\$0.970

This line item funds modifications to the VC-25 aircraft. The VC-25, a Boeing 747-200B, is a four engine long-range aircraft used for presidential support. The FY01 modification budgeted enhances operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

CLASS P	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
	3149W	WINDSHEAR WARNING		0.2							7.8
	3150	NAVSTAR GLOBAL POS	4.2	0.2							23.9
	9330	FUEL QUANTITY INDIC	3.1								3.1
	9709	GLOBAL AIR TRAFFIC	2.6	7.1		0.6					10.3
	99999S	SERVICE BULLETTINS	0.2	0.7	0.1	0.1	0.8	0.9			9.9
	99999X	LOW COST MODIFICATI	0.1	0.1	0.1	0.1	0.1	0.1			0.7
	TAWS	TERRAIN AWARENESS		0.3							3.2
	Z88888	REPROGRAMMINGS	0.1	0.6							0.1
TOTAL FOR CLASS P			10.3	9.1	0.2	1.4	0.2	0.9	1.0	0.0	59.0
TOTAL FOR AIRCRAFT C-25			10.3	9.1	0.2	1.4	0.2	0.9	1.0	0.0	59.0

Totals may not add due to rounding.

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02/15/2000

FY 2001 PBR

Modification Title and No: NAVSTAR GLOBAL POSITIONING SYSTEM MN-3150

Models of Aircraft Affected: VC-25A

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-25

Center: OC-ALC - Tinker AFB Okla City, OK

PE 0401314F Team MOBIL

**Description/Justification**

This Nav/Safety modification will install (3) 12 channel Commercial Global Positioning System (GPS) with P-Y coded capability. The modification will add FMS, reporting ACARS, ADS, CMDU, DME, position reports, oceanic clearances, and replace EFIS-10 displays with new LCD flat panel displays. This modification will be baselined with the predictive wind shear warning system during depot maintenance. The funding in FY 99 is for FAA certification, to include ground/flight testing and supplemental type certification (STC). This mod is unique to the VC-25A. Commercial 747-200s do not have a comparable STC.

Aircraft Breakdown: Active 2, Reserve 0, ANG 0

**Development Status**

N/A

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

OGC

INTEGRATION

FAA CERTIFICATION

INSTALLATION OF HARDWARE

FY-96 1 KITS

FY-98 1 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
2	3.5					
[2]	8.1					
	6.5					
	1.3					
	0.0					
		1.2				
		3.0				
			[1]			
				0.2		
		1	1	0.2		
2	19.5	4.2				

(Continued)

UNCLASSIFIED

Fact Sheet: C-25 MN-3150 NAVSTAR GLOBAL POSITIONING SYSTEM

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					2	3.5		
KITS NONRECUR						8.1		
EQUIPMENT					[2]	6.5		
EQUIP NONREC								
CHANGE ORDERS								
DATA						1.3		
SIM/TRAINER								
SUPPORT-EQUIP								
OGC						0.0		
INTEGRATION						1.2		
FAA CERTIFICATION						3.0		
INSTALLATION OF HARDWARE								
FY-96 1 KITS					[1]	0.2		
FY-98 1 KITS					[1]	0.2		
TOTAL INSTALL					2	0.2		
TOTAL COST (BP-1100)					2	23.9		
(Totals may not add due to rounding)								

Method of Implementation: CLS

Initial Lead Time: 30 Months

Follow-On Lead Time: 21 Months

Milestones

	FY-96	FY-97	FY-98	FY-99	FY-00
Contract Date (Month/CY)	09/96	03/98			
Delivery Date (Month/CY)	03/99	12/99			

Installation Schedule

	FY-96	FY-97	FY-98	FY-99	FY-00
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input				1	1
Output				1	1

02/15/2000

FY 2001 PBR

Modification Title and No: FUEL QUANTITY INDICATOR SYSTEM (FQIS) MN-9330

Models of Aircraft Affected:

Center: OC-ALC - Tinker AFB Okla City, OK

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-25

PE 0401314F Team MOBIL

**Description/Justification**

This NA V/Safety modification directs the accomplishment of FAA Airworthiness Directive AD 98-20-40, which requires the installation of all shielding and separation of the electrical wiring of the fuel quantity indication system (FQIS). This modification will install Transient Suppression Devices and digital indicators by Boeing Service Bulletin. The intent is to prevent electrical transients induced by electromagnetic interference (EMI), or electrical short circuit conditions from causing arcing of the FQIS electrical wiring or probes in the fuel tank(s).

Aircraft Breakdown: Active 2, Reserve 0, ANG 0

**Development Status**

N/A

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

INSTALLATION OF HARDWARE

FY-99 2 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
QTY	COST	QTY	COST	QTY	COST

2 0.2

2.2

[2] 0.5

0.2

2 3.1



(Continued)

UNCLASSIFIED

Fact Sheet: C-25 MN-9330 FUEL QUANTITY INDICATOR SYSTEM (FQIS)  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					2		2	0.2
KITS NONRECUR								2.2
EQUIPMENT					[2]			0.5
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.2
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-99 2 KITS								
TOTAL INSTALL					2		2	3.1
TOTAL COST (BP-1100)								
(Totals may not add due to rounding)								

Method of Implementation: DEPOT

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

**Milestones**

	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)				
Delivery Date (Month/CY)				

**Installation Schedule**

	FY-99		FY-00		FY-01		FY-02	
Quarters	1	2	3	4	1	2	3	4
Input								
Output								

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: GLOBAL AIR TRAFFIC MANAGEMENT (GATM) MN-9709  
 Models of Aircraft Affected: VC-25A  
 UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT  
 Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: C-25  
 PE 0401314F  
 Team MOBIL  
 Center: OC-ALC - Tinker AFB Okla City, OK

**Description/Justification**  
 This GATM (navigation) Modification will install equipment required for FANS 1 software adaptation to the 747-200. The FANS 1 Boeing system will allow AF-1 to navigate on RNP routes worldwide. This modification will be installed concurrently with depot maintenance. Boeing has already adapted software to 747-300 and 400 series aircraft.

Aircraft Breakdown: Active 2, Reserve 0, ANG 0

**Development Status**  
 N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS					1	0.8			1			
KITS NONRECUR				2.6		3.5						
EQUIPMENT			[1]		[1]	1.4			[1]			
EQUIP NONREC												
CHANGE ORDERS												
DATA						1.3						
SIM/TRAINER												
SUPPORT-EQUIP												
OGC						0.1						
INSTALLATION OF HARDWARE												
FY-00 1 KITS									[1]	0.6		
FY-02 1 KITS											[1]	
TOTAL INSTALL									1	0.6	1	
TOTAL COST (BP-1100)				2.6	1	7.1			1	0.6		

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-25 MN-9709 GLOBAL AIR TRAFFIC MANAGEMENT (GATM)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					2			0.8
KITS NONRECUR							[3]	6.1
EQUIPMENT								1.4
EQUIP NONREC								
CHANGE ORDERS								
DATA								1.3
SIM/TRAINER								
SUPPORT-EQUIP								
OGC								0.1
INSTALLATION OF HARDWARE								
FY-00 1 KITS							[1]	0.6
FY-02 1 KITS							[1]	
TOTAL INSTALL					2			0.6
TOTAL COST (BP-1100)					2			10.3

(Totals may not add due to rounding)

Method of Implementation: CLS

Initial Lead Time: 24 Months

Follow-On Lead Time: 6 Months

Milestones

Contract Date (Month/CY)

Delivery Date (Month/CY)

FY-98

FY-99

FY-00

03/00

03/02

FY-01

FY-02

06/02

12/02

FY-03

Installation Schedule

	FY-98		FY-99		FY-00		FY-01		FY-02		FY-03	
Quarters	1	2	3	4	1	2	3	4	1	2	3	4
Input												
Output												

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)					DATE February 2000		
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: C-130				
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005
	\$115.991	\$166.981	\$91.524	\$61.089	\$149.521	\$201.479	\$258.440

This line item funds modifications to the C-130 aircraft. The four engine C-130 provides theater airlift and carries either 92 troops, 64 paratroopers, 74 litter patients, or 6 standard 463-L pallets. The overall goal of the modifications budgeted in FY01 is to enhance flight safety while improving reliability and maintainability. The primary modifications in FY01 are the Airlift Defensive System and the Enhanced Traffic Alert & Collision Avoidance System program. The specific modifications budgeted and programmed are below.

MOD CLASS P-S	NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
	99999A	LOW COST SAFETY MO	0.1	0.1	1.9	0.1	0.1	0.1	0.1	9.5	11.4
TOTAL FOR CLASS P-S											
P	11130	PODDED RECONNAISS		9.4							9.4
	12603B	APQ-122 RADAR REPLA	4.4	0.8							134.0
	17605B	AUTOPILOT/GCAS	34.8	42.6	7.8	6.7					240.3
	18600B	ELECTRICAL SYSTEM	16.2	27.7	11.3	1.2					98.5
	18603B	FUEL QTY SYS UPGRA	1.1	1.0	0.9	0.8	0.7	0.8	0.8		18.2
	3149	INSTR OF SOLID-STATE		2.6	3.2						5.8
	3150	NAVSTAR GLOBAL POS	2.6								74.8
	3190	SCNS	4.5	0.2							417.3
	3353	HF AUTO COMM PROC	3.2	2.7	0.7						50.3
	3455	AIRLIFT DEFENSIVE SY	14.2	20.9	17.3	13.6	8.6	5.0	2.2		158.2
	3587	MICROWAVE LANDING	0.3								34.5
	6040	ENGINES		6.0		6.4	6.4	6.4	6.4		31.5
	62151B	STROBE LIGHTS	0.1								11.3
	8220	ALR-69 (RWR)	1.3	0.6			15.5	13.7	15.3	181.5	271.4

Totals may not add due to rounding.

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
P-1 ITEM NOMENCLATURE: C-130						
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications						
	1999	2000	2001	2002	2003	2004
COST (In Mil)	\$115.991	\$166.981	\$91.524	\$61.089	\$149.521	\$201.479
						2005
						\$258.440

This line item funds modifications to the C-130 aircraft. The four engine C-130 provides theater airlift and carries either 92 troops, 64 paratroopers, 74 litter patients, or 6 standard 463-L pallets. The overall goal of the modifications budgeted in FY01 is to enhance flight safety while improving reliability and maintainability. The primary modifications in FY01 are the Airlift Defensive System and the Enhanced Traffic Alert & Collision Avoidance System program. The specific modifications budgeted and programmed are below.

MOD CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
8424		AERSPACE RESCUE A	6.7	6.4	7.2	7.3	14.8	33.2	16.5		100.1
8448		BLEED AIR DUCT REPL	0.8	2.8	2.5	0.8					7.4
8455		INSTALLATION OF AN/A	3.8	4.5	0.4						14.7
8516		IP1310 REPLACEMENT			1.8	1.0					2.8
8517		C-130 AVIONICS MODE	0.4				36.0	80.8	187.6	2,983.0	3,289.7
8520		NVIS	1.2	0.9	0.2						2.7
8526		ENHANCED TCAS (TCA	15.5	16.7	18.5	1.8	4.3	0.3	0.3		75.4
8553		EMERGENCY ESSENTI		0.7	0.3						1.0
8558		INSTALLATION OF 3 RE		1.0	2.9	4.5	2.0	0.2			10.7
8561		SYNCHROPHASER WIR		0.6	4.3	4.5	4.8	1.2			15.4
8562		C-130 GENERATOR DIS		0.7	1.2	2.4	2.6				6.9
8577		ALE-47 CHAFF AND FLA			1.3	4.5	4.6				10.4
8591		ALR-69 UPGRADE				1.5	11.8	10.9	11.0	0.3	35.5
8626		C-130 SIMULATOR UPG		3.7	4.5	4.1	4.1				16.4
8629		LARGE AIRCRAFT INFR					33.4	48.9	6.0		88.3
99999M		MISC SIMULATOR UPD			0.2	0.1	0.1	0.1	0.1	9.5	9.7
99999S		SERVICE BULLETINS			1.3	0.1	0.1	0.1	0.1	9.5	11.2

Totals may not add due to rounding.

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UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: C-130			
	1999	2000	2001	2002	2003	2004
						2005
COST (In Mil)	\$115.991	\$166.981	\$91.524	\$61.089	\$149.521	\$201.479
						\$258.440

This line item funds modifications to the C-130 aircraft. The four engine C-130 provides theater airlift and carries either 92 troops, 64 paratroopers, 74 litter patients, or 6 standard 463-L pallets. The overall goal of the modifications budgeted in FY01 is to enhance flight safety while improving reliability and maintainability. The primary modifications in FY01 are the Airlift Defensive System and the Enhanced Traffic Alert & Collision Avoidance System program. The specific modifications budgeted and programmed are below.

CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
99999X		LOW COST MODIFICATION	0.2		1.9	0.1	0.1	0.1	0.1		5.8
CWREPL		SYSTEMS/STRUCTURE									
DC101		FM IMMUNITY		2.6							2.6
Z88888		REPROGRAMMINGS	4.7	11.8							15.9
TOTAL FOR CLASS P			116.0	167.0	89.6	61.4	149.8	201.8	258.7	3,309.2	5,415.8
TOTAL FOR AIRCRAFT C-130			116.1	167.1	91.5	61.5	149.9	201.9	258.8	3,318.7	5,427.3

Totals may not add due to rounding.

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489

UNCLASSIFIED

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: PODDED RECONNAISSANCE SYSTEM MN-11130  
 Models of Aircraft Affected: Multiple

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: C-130  
 PE 0207217F Team INFO

Center: ASC - Wright Patterson AFB, OH

**Description/Justification**  
 The Podded Reconnaissance System (PRS) modifies wing mounted pods containing reconnaissance systems for Air National Guard (ANG) F-16s and ANG C-130s. SCATHE VIEW is a low profile, situation awareness imagery system to be used by the Warfighter in low threat environments. The system consists of C-130s, modified to carry the sensor and operator pallet, an Electro-Optic/Infrared (EO/IR) imagery sensor, and a PC based ground processing station. The sensor and operator's operator pallet are easily moved from aircraft to aircraft. FY00 funds modify eight Reno Air National Guard (ANG) C-130s to carry identical imagery sensor suites and updates the USAFE operator pallets to a common configuration. The two (2) update kits are listed a change orders for funding purposes. Three suites of sensors are being purchased for the ANG.

Aircraft Breakdown: Active 8, Reserve 0, ANG 8

**Development Status**  
 N/A

**Projected Financial Plan**

	PRIOR QTY	COST	FY-99 QTY	COST	FY-00 QTY	COST	FY-01 QTY	COST	FY-02 QTY	COST	FY-03 QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS					8	0.8						
KITS NONRECUR						0.2						
EQUIPMENT					[3]	5.8						
EQUIP NONREC						0.5						
CHANGE ORDERS					[2]	1.7						
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
INSTALLATION OF HARDWARE												
FY-00 8 KITS						0.4	[8]					
TOTAL INSTALL						0.4	8					
TOTAL COST (BP-1100)					8	9.4						

(Totals may not add due to rounding)



(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-111130 PODDED RECONNAISSANCE SYSTEM  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDTE&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					8		8	0.8
KITS NONRECUR								0.2
EQUIPMENT					[3]		[3]	5.8
EQUIP NONREC								0.5
CHANGE ORDERS					[2]		[2]	1.7
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-00 8 KITS					[8]		[8]	0.4
TOTAL INSTALL					8		8	0.4
TOTAL COST (BP-1100)					8		8	9.4
(Totals may not add due to rounding)								

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 8 Months

Follow-On Lead Time: 8 Months

Milestones

FY-99 FY-00 FY-01  
Contract Date (Month/CY) 12/00  
Delivery Date (Month/CY) 08/01

Installation Schedule

	FY-99			FY-00			FY-01		
Quarters	1	2	3	4	1	2	3	4	1
Input									
Output									

02/15/2000

FY 2001 PBR

Modification Title and No: APQ-122 RADAR REPLACEMENT MN-12603B

Models of Aircraft Affected: C-130E

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: WR-ALC Warner Robins AFB Warner Robins, GA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-130

PE 0401115F Team MOBIL

**Description/Justification**

Presently the APQ-122(V)1 is installed on the C-130E Adverse Weather Aerial Delivery System (AWADS) aircraft. The modification needs to be accomplished due to the low reliability (12-18 hours MTBF). The lack of bits and pieces and of repairable assemblies has resulted in intensive management of the APQ-122 system by the depot. Modification would result in a system with field demonstrated Mean Time Between Failure (MTBF) of 150 hours. FY92 ECP will include LPI (Low Probability of Intercept) implementation in sector scan. PMD 6211(2)/12603B. 90 Mod Install (\$2.250). ACC/AMC: 33 E AWADS, USAFE: 17 E AWADS ICS ongoing until organic repair begins in FY99/4. Transition began Jan FY99.

Aircraft Breakdown: Active 50, Reserve 0, ANG 0

**Development Status**

N/A.

**Projected Financial Plan**

RDT&E (3600)

**PROCUREMENT (3010)**

INSTALL KITS

KITS NONREC

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

ICS

FLIGHT TEST

OGC

**INSTALLATION OF HARDWARE**

FY-87 2 KITS

FY-88 16 KITS

FY-89 24 KITS

FY-90 8 KITS

TOTAL INSTALL

50

TOTAL COST (BP-1100)

50 128.8 4.4 0.8

(Totals may not add due to rounding)

PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
QTY	COST	QTY	COST	QTY	COST

49 4.8

1 7.1

[49] 29.0

[1] 29.0

7.4 0.2

4.4 0.8

4.4

24.1

18.0 4.2

0.4

0.2 0.0

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-12603B APQ-122 RADAR REPLACEMENT

(Continued)

FY-04	FY-05	TOTAL
QTY COST	QTY COST	QTY COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS	49	4.8
KITS NONRECUR	1	7.1
EQUIPMENT	[49]	29.0
EQUIP NONREC	[1]	29.0
CHANGE ORDERS		8.4
DATA		4.4
SIM/TRAINER		4.4
SUPPORT-EQUIP		24.1
ICS		22.2
FLIGHT TEST		0.4
OGC		0.2

INSTALLATION OF HARDWARE

FY-87	2 KITS	
FY-88	16 KITS	
FY-89	24 KITS	
FY-90	8 KITS	
TOTAL INSTALL	[50]	
	50	
TOTAL COST (BP-1100)	50	134.0

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 28 Months

Follow-On Lead Time: 45 Months

Milestones

Contract Date (Month/CY)	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97
09/87	09/87	12/87	12/88	12/89							
Delivery Date (Month/CY)	01/90	12/92	03/93	09/93							

Installation Schedule

	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98
Quarters 1	2	3	4	1	2	3	4	1	2	3	4	1
Input												
Output												
Quarters 1	2	3	4	1	2	3	4	1	2	3	4	1
Input	6	6	6	2	1	1	1					
Output	6	6	6	2	1	1	1					

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: AUTOPILOT/GCAS MN-17605B  
 Models of Aircraft Affected: ALL C-130  
 Center: WR-ALC Warner Robins AFB Warner Robins, GA  
 PE 0401115F Team MOBIL  
 Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: C-130

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

**Description/Justification**

This navigation safety modification replaces the obsolete E-4 Autopilot system and installs Ground Collision Avoidance System (GCAS) capability. PMD 17605B/2264(4). ACC: 7 ECE, 14 ECH Compass Call, 9 HCN/P Tanker, 1E; AETC: 23 E's, 3 MCE/H Combat Talon, 4 MCP Combat Shadow; AFMC: 1 ECH Compass Call, 1 NCH; AFRES: 31 E, 8 MCE/H Combat Talon, 10 WCH, 8 HCN/P Tanker, 5 MCP Combat Shadow, 56 H-2 GCAS only, 19 H-3 GCAS only; AFSOC: 4 E, 21 ACH/U Gunship, 27 MCE/H Combat Talon, 19 MCP Combat Shadow; AMC: 42 E, 29 H-1, 14 H-3, ANG: 72 E, 7 HCN/P Tanker, 104 H-2 GCAS only, 30 H-3 GCAS only, 7 LCH GCAS only, 3 HCN GCAS only; PACAF: 13 E, 18 H-1; USAFE: 19 E. FY00 kit buys are all autopilot kits (no GCAS) including 20 duals & 55 AFSOC/Spec Mission kits resulting in higher kit unit cost. FY00 is last contract option & requires a 2 year install schedule due to # of AFSOC/Spec Mission a/c. Renegotiation will result in even higher kit costs (est 30-50% incr due to contractor shut down and tool-up time. (233-GCAS/GCAS Retro, 426-Autopilot/GCAS, Total 659). Kitproof of AWADS, May 96. OT&E, Jun 96.

Aircraft Breakdown: Active 269, Reserve 137, ANG 223

**Development Status**  
 N/A.

**Projected Financial Plan**

	PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	431	13.2	79	4.8	111	7.6						
KITS NONRECUR	10	7.0										
EQUIPMENT	[431]	40.2	[79]	14.4	[111]	20.2						
EQUIP NONREC	[10]	37.3										
CHANGE ORDERS		2.8		0.7		0.7						
DATA		6.4		0.3		0.1						
SIM/TRAINER	[11]	6.2		0.4		0.5						
SUPPORT-EQUIP		6.2				0.5						
SOFTWARE		7.3				0.5						
WARRANTY		2.5										
FLIGHT TEST		0.6		0.2		0.1						
OGC		3.5		1.2		0.7						
INSTALLATION OF HARDWARE												
FY-92 1 KITS	[1]	0.0										
FY-94 111 KITS	[108]	4.1	[2]	0.2	[1]	0.2						
FY-96 148 KITS	[138]	11.0	[10]	1.2								
FY-97 116 KITS			[100]	8.7	[16]	1.5						
FY-98 65 KITS			[45]	2.6	[19]	1.2	[1]	0.3				
FY-99 79 KITS					[79]	9.3						
FY-00 111 KITS							[61]	7.5	[50]	6.7		
TOTAL INSTALL	247	15.1	157	12.8	115	12.2	62	7.8	50	6.7		
TOTAL COST (BP-1100)	441	148.4	79	34.8	111	42.6		7.8				6.7

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-17605B AUTOPILOT/GCAS  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS	621	25.6		
KITS NONRECUR	10	7.0		
EQUIPMENT	[621]	74.8		
EQUIP NONREC	[10]	37.3		
CHANGE ORDERS		4.2		
DATA		6.8		
SIM/TRAINER	[13]	6.7		
SUPPORT-EQUIP		7.1		
SOFTWARE		7.3		
WARRANTY		2.5		
FLIGHT TEST		0.9		
OGC		5.5		
INSTALLATION OF HARDWARE				
FY-92	[1]	0.0		
1 KITS				
FY-94	[111]	4.6		
111 KITS				
FY-96	[148]	12.2		
148 KITS				
FY-97	[116]	10.2		
116 KITS				
FY-98	[65]	4.1		
65 KITS				
FY-99	[79]	9.3		
79 KITS				
FY-00	[111]	14.2		
111 KITS				
TOTAL INSTALL	631	54.6		
TOTAL COST (BP-1100)	631	240.3		

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 24 Months Follow-On Lead Time: 12 Months

#### Milestones

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	06/92	09/94	09/94	06/96	06/96	03/97	06/98	01/99	12/99		
Delivery Date (Month/CY)	06/94	06/95	06/95	06/97	06/97	03/98	06/99	01/00	12/00		

#### Installation Schedule

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-99
Quarters	1	2	3	4	1	2	3	4	1	2	3	4
Input					1	1	11	31	23	11	1	1
Output					1	1	11	31	23	11	1	1

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UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-17605B AUTOPILOT/GCAS

Installation Schedule Continued

	FY-00				FY-01				FY-02			
Quarters	1	2	3	4	1	2	3	4	1	2	3	4
Input	34	28	27	26	16	16	15	15	15	15	10	10
Output	34	28	27	26	16	16	15	15	15	15	10	10

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: ELECTRICAL SYSTEM UPGRADE MN-18600B  
 Models of Aircraft Affected: C-130E/H/N/P/U  
 Center: WR-ALC Warner Robins AFB Warner Robins, GA  
 PE 0401115F Team MOBIL  
 Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: C-130

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

**Description/Justification**  
 This FLIGHT SAFETY mod incorporates C-130 Broad Area Review (BAR) recommendations to upgrade the C-130 electrical power system that was designed in the 1950's. Modern avionics systems, however, are dependent on solid-state circuits and computer support which makes them more susceptible to disruptive electrical transients/spikes within the system. The propeller synchrophaser, for example, has translated a low voltage condition into a loss of engine power resulting in over 30 flight mishaps from 1987 to 1989. The C-130 will continue to be a viable part of the airlift forces into the next century. The C-130 will need 'clean' electrical power for all new modifications to operate properly and reliably. FY00 kits will be phase delivered causing installation to cover 6 qtrs. PMD 2264(2). AFSOC: 4E's, ACC: IE, 7 ECE's, 14 ECH's, 9HCP's AETC: 45E's AFMC: 1EH's, 1NH's AFRC: 30E's, 55H's, 4HN's, 4HP's, 10WH's AMC: 45E's, 29H's ANG: 64E's, 104H's, 3HN's, 7HP's, 4LH's PACAF: 18H's. Not going to mod: MCE's, MCH's, ACH's, ACU's, MCP's H-3's, or J models.

Aircraft Breakdown: Active 191, Reserve 115, ANG 153

**Development Status**  
 N/A..

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	166	19.6	132	9.4	157	15.5						
KIT'S NONRECUR	4	9.4										
EQUIPMENT	[166]	3.1	[132]	2.1	[157]	3.0						
EQUIP NONREC	[4]	1.9										
CHANGE ORDERS												
DATA		2.6		0.1								
SIM/TRAINER		0.1										
SUPPORT-EQUIP		0.1										
FLIGHT TEST		0.0										
TOOLING		0.0										
WARRANTY		1.8		0.7			0.2	0.0				
OGC												
INSTALLATION OF HARDWARE												
FY-93 4 KITS	[4]	0.0										
FY-94 2 KITS	[2]	0.1										
FY-95 18 KITS	[18]	0.7										
FY-96 67 KITS	[55]	2.7	[12]	0.8								
FY-97 79 KITS			[79]	3.0								
FY-99 132 KITS					[132]	9.2						
FY-00 157 KITS							[122]	11.1	[35]	1.2		
TOTAL INSTALL	79	3.4	91	3.8	132	9.2	122	11.1	35	1.2		
TOTAL COST (BP-1100)	170	42.0	132	16.2	157	27.7		11.3		1.2		

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-18600B ELECTRICAL SYSTEM UPGRADE

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDTE&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					455	44.5		
KITS NONRECUR					4	9.4		
EQUIPMENT					[455]	8.2		
EQUIP NONREC					[4]	1.9		
CHANGE ORDERS								
DATA						2.7		
SIM/TRAINER								
SUPPORT-EQUIP						0.1		
FLIGHT TEST						0.1		
TOOLING						0.0		
WARRANTY								
OGC						2.7		
INSTALLATION OF HARDWARE								
FY-93	4	KITS			[4]	0.0		
FY-94	2	KITS			[2]	0.1		
FY-95	18	KITS			[18]	0.7		
FY-96	67	KITS			[67]	3.4		
FY-97	79	KITS			[79]	3.0		
FY-99	132	KITS			[132]	9.2		
FY-00	157	KITS			[157]	12.4		
TOTAL INSTALL					459	28.8		
TOTAL COST (BP-1100)					459	98.5		

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)		06/94	06/94	06/95	06/96	12/96			12/99		
Delivery Date (Month/CY)		06/95	06/95	12/97	03/98	09/98			12/99		

**Installation Schedule**

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1	2	3	4	1	2	3	4	1	2	3
Input											
Output											



(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-18600B ELECTRICAL SYSTEM UPGRADE

Installation Schedule Continued

	<u>FY-00</u>				<u>FY-01</u>				<u>FY-02</u>			
	1	2	3	4	1	2	3	4	1	2	3	4
Quarters	1	2	3	4	1	2	3	4	1	2	3	4
Input	31	34	33	34	30	30	30	32	20	15		
Output	14	31	34	33	34	30	30	30	32	20	15	

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

**Description/Justification**

**DESCRIPTION/INSTRUCTIONS**

Modification upgrades the fuel quantity system on early (FY73-74) E/C-130H aircraft by installing externally mounted fuel probes, digital fuel quantity indicators and associated wiring. These are the same probes installed on the later H-model aircraft, so no new development is required. Installation of the external probes is accomplished by installation of a new outer wing (when available from retiring E-models) which already have external probes. 12 EC-130H are also receiving digital fuel quantity indicators. Modification increases maintenance hours approximately 90 hours per probe due to improved accessibility and increases MTBF of the fuel indicators to 3500 hours. PMD 2265(4), Appendix M. ACC: 12 ECH Compass Call; AMC: 29 H-1, 1 Prototype (H1 Wing); PACAF: 18 H-1

**Aircraft Breakdown:** Active 60, Reserve 0, ANG 0

### Development Status

N/A.

### Projected Financial Plan

PROJECTED FINANCIAL TOTAL												
	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	33	2.6	6	0.0	5	0.0	4	0.0	4	0.0	4	0.0
KITS NONRECUR	1	0.9										
EQUIPMENT	[33]	2.2	[6]	0.0	[5]	0.1	[4]	0.0	[4]	0.0	[4]	0.0
EQUIP NONREC	[1]	0.1										
CHANGE ORDERS												
DATA		0.1										
SIM/TRAINER												
SUPPORT-EQUIP												
TOOLING		0.4		0.1		0.1		0.0		0.0		0.0
OGC		0.2		0.0								
INSTALLATION OF HARDWARE												
FY-92	[3]	0.3										
3 KITS												
FY-93	[11]	2.6										
11 KITS												
FY-94	[12]	2.8	[5]	1.0	[3]	0.4	[3]	0.4				
20 KITS												
FY-99					[3]	0.4	[3]	0.4				
6 KITS												
FY-00					[3]	0.4	[2]	0.3	[3]	0.4	[2]	0.3
5 KITS												
FY-01												
4 KITS												
FY-02												
4 KITS												
FY-03												
4 KITS												
FY-04												
3 KITS												
TOTAL INSTALL												
	26	5.7	5	1.0	6	0.9	5	0.7	5	0.7	4	0.6
TOTAL COST (BP-1100)												
	34	12.0	6	1.1	5	1.0	4	0.9	4	0.8	4	0.7
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-18603B FUEL QTY SYS UPGRADE ON C-130H  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	QTY
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS	3	0.0		59
KITS NONRECUR				1
EQUIPMENT	[3]	0.0		[59]
EQUIP NONREC				[1]
CHANGE ORDERS				0.1
DATA		0.1		0.2
SIM/TRAINER				
SUPPORT-EQUIP				
TOOLING		0.0		0.6
OGC				0.2
INSTALLATION OF HARDWARE				
FY-92				[3]
FY-93				[11]
FY-94				[20]
FY-99				[6]
FY-00				[5]
FY-01				[4]
FY-02				[4]
FY-03				[4]
FY-04				[3]
TOTAL INSTALL	4	0.6	5	60
TOTAL COST (BP-1100)	3	0.8		60
(Totals may not add due to rounding)				18.2

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 18 Months

Follow-On Lead Time: 18 Months

**Milestones**

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
Contract Date (Month/CY)	03/92	03/93	03/94	03/94				12/98	12/99	12/00	12/01	12/02	12/03	
Delivery Date (Month/CY)	09/93	09/94	09/95					06/00	06/01	06/02	06/03	06/04	06/05	

**Installation Schedule**

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Input	2	3	4	1	2	3	4	1	2	3	4	1	2	3
Output	1	2	3	4	1	2	3	4	1	2	3	4	1	2

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-18603B FUEL QTY SYS UPGRADE ON C-130H

Installation Schedule Continued

		FY-00				FY-01				FY-02				FY-03				FY-04				FY-05			
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
	Input	2	1	2	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	
	Output	3	2	1	2	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	3	

02/15/2000

FY 2001 PBR

Modification Title and No: INSTL OF SOLID-STATE FLIGHT DATA RECORDER MN-3149

Models of Aircraft Affected: C-130 (ALL EXCEPT MC-130H Center: WR-ALC Warner Robins AFB Warner Robins, GA & AC-130U)

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-130 Class P

PE 0401115F Team MOBIL

#### Description/Justification

This navigation safety mod replaces the existing digital flight data recorder & download equipment with a form/fit/function (F3) solid state recorder and new analysis equipment. This modification is in response to the C-130 BAR recommendation for a replacement recorder. The existing tape-based recorder & download equipment are unsupportable. Information required for mishap investigation is often missing or incomplete due to problems with the recorder. The recorder is consistently in the top 50 critical items due to repair parts problems & download equipment is no longer repairable or procurable. Gp B is an F3, COTS replacement & will be installed at O&I level. The support equipment is also COTS and will be provided in conjunction with the Group B. Aircraft breakout: ACC: 1E, 14 ECH, 9 HCP; AETC: 18E, 2 NCH; AFRC: 31 E, 8 MCE Combat Talon, 56 H-2, 23 H-3, 10 WCH, 4 HCP Tanker, 5 MCP Combat Shadow; AFSOC: 4 E, 6 MCE Combat Talon, 8 ACH Gunship, 19 MCP Combat Shadow; AMC: 5 E, 29 H-1, 14 H-3, 42 H-3, 10 LCH, 13 HCN/P Tanker; PACAF: 4E, 18 H-1

Aircraft Breakdown: Active 151, Reserve 137, ANG 195

#### Development Status

N/A.

#### Projected Financial Plan

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONREC

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

INSTALLATION OF H

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
				146	1.9	241	3.2				
				1	0.0						
					0.3						
					0.4						
						[161]				[322]	
				147	2.6	241	3.2				

UNCLASSIFIED

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
INSTALLATION OF H				
TOTAL COST (BP-1100)				
(Totals may not add due to rounding)				
Method of Implementation: ORG/INTERMEDIATE				
Initial Lead Time: 3 Months				
Follow-On Lead Time: 1 Month				

**Milestones**

	FY-00	FY-01
Contract Date (Month/CY)	03/00	12/00
Delivery Date (Month/CY)	06/00	01/01

02/15/2000

FY 2001 PBR

Modification Title and No: NAVSTAR GLOBAL POSITIONING SYSTEM MN-3150

Models of Aircraft Affected: ALL MODELS OF C-130

Center: WR-ALC Warner Robins AFB Warner Robins, GA

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-130

PE 0401115F Team MOBIL

**Description/Justification**

This navigation safety modification installs a space-based radio navigation system that will provide suitably equipped host vehicles with highly accurate, jam-resistant, three dimensional position, velocity, and time data, worldwide in all weather to improve mission effectiveness. Due to installation learning efficiencies, installations in FY00 are being funded with FY99 install dollars. ACC: 11 E, 7 ECE, 9 HCP; AETC: 45 E, 4 MCP; AFRC: 30 E, 65 H, 4 HCN, 4 HCP, 5 MCP, 10 WCH; AFSOC: 4 E, 19 MCP; AMC: 52 E, 30 H; ANG: 64 E, 119 H, 8 ECE, 6 HCN, 7 HCP, 7 LCH; PACAF: 8 E, 17 H; USAFE: 19 E

Aircraft Breakdown: Active 225, Reserve 118, ANG 211

**Development Status**

N/A.

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
INSTALL KITS	552	6.1				
KITS NONRECUR	2	10.3				
EQUIPMENT	[552]	37.8				
EQUIP NONREC	[2]	0.5				
CHANGE ORDERS		1.0				
DATA		1.6				
SIM/TRAINER	[1]	0.5				
SUPPORT-EQUIP						
SOFTWARE						
FLIGHT TEST		0.8				
OGC		1.4				
TOOLING		0.0				
INSTALLATION OF HARDWARE						
FY-92 5 KITS	[5]	0.2				
FY-94 76 KITS	[76]	2.9				
FY-95 142 KITS	[142]	5.9				
FY-96 142 KITS	[142]	3.2				
FY-97 164 KITS			[133]	2.6	[31]	
FY-98 25 KITS			[25]	2.6	56	
TOTAL INSTALL	365	12.1	133	2.6	56	
TOTAL COST (BP-1100)	554	72.3				

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-3150 NAVSTAR GLOBAL POSITIONING SYSTEM  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					552	6.1		
KITS NONRECUR					2	10.3		
EQUIPMENT					[552]	37.8		
EQUIP NONREC					[2]	0.5		
CHANGE ORDERS						1.0		
DATA						1.6		
SIM/TRAINER					[1]	0.5		
SUPPORT-EQUIP								
SOFTWARE								
FLIGHT TEST						0.8		
OGC						1.4		
TOOLING						0.0		
INSTALLATION OF HARDWARE								
FY-92 5 KITS					[5]	0.2		
FY-94 76 KITS					[76]	2.9		
FY-95 142 KITS					[142]	5.9		
FY-96 142 KITS					[142]	3.2		
FY-97 164 KITS					[164]	2.6		
FY-98 25 KITS					[25]			
TOTAL INSTALL					554	14.7		
TOTAL COST (BP-1100)					554	74.8		

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 9 Months

Follow-On Lead Time: 21 Months

#### Milestones

Contract Date (Month/CY)  
06/93

Delivery Date (Month/CY)  
03/94

FY-91

FY-92

FY-93

FY-94

FY-95

FY-96

FY-97

FY-98

FY-99

FY-00

#### Installation Schedule

	FY-91	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
Quarters 1	2	3	4	1	2	3	4	1	2	3
Input	3	4	1	2	3	4	1	2	3	4
Output	2	3	4	1	2	3	4	1	2	3
Quarters 1	2	3	4	1	2	3	4	1	2	3
Input 36	33	32	31	25						
Output 36	33	32	31	25						



### Models of Aircraft Affected: C-130B/E/H/N/P

UNCLASSIFIED

## MODIFICATION OF AIRCRAFT

Center: WR-ALC Warner Robins AFB Warner Robins, GA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-130 Class P

**Team MOBIL**

**Description/Justification**

Equips C-130 aircraft with a Self-Contained Navigation System (SCNS). The SCNS will enable C-130s to operate without external navigation aids, since in battle zones navigation aids are likely to be shut down or jammed. The SCNS will improve the C-130 mission success likelihood, particularly on low level missions. The SCNS will be procured as a single entity and will include: Inertial Navigation Unit (INU), doppler velocity sensor, cockpit display unit, and an air data computer. Data Transfer System (DTS) permits aircrews to preload mission data in ground facilities for digital transfer by manual loading on aircraft saving many manhours. FY93 ECP's include dual inertial navigation system & ORP update. FY96/97/98/99 funds High Speed Processor upgrade to allow SCNS to function properly with on going and planned avionics, and software upgrades. PMD: 3115(3)/3190. 1173N installs are still in progress. Note: total kit procurements, total installation line, and total kits actually installed differ because 10 kits were procured separately prior to FY87 thereby reducing the number of kits required to be purchased under this modification. 139 kits were installed via O&I. ACC: 9 E, 7 ECE, 9 HCP; AETC: 39 E, 4 MCP; AFRC: 25 E, 71 H, 4 HCN, 3 HCP, 5 MCP, 10 WCH; AFSOC: 3 E, 19 MCP; AMC: 57 E, 67 H; ANG: 56 E, 89 H, 8 ECE, 6 HCN, 7 HCP, 7 LCH; PACAF: 6 E, 21 H; USAFE: 17 E

**Aircraft Breakdown:** Active 258, Reserve 118, ANG 173

### **Development Status**

**N/A**

## **Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
<b>RDT&amp;E (3600)</b>												
<b>PROCUREMENT (3010)</b>												
INSTALL KITS	535	24.9										
KITS NONRECUR	4	14.4										
EQUIPMENT	[535]	133.1										
EQUIP NONREC	[4]	17.2										
CHANGE ORDERS		8.6		0.0								
DATA		6.4		0.1								
SIM/TRAINER	[5]	26.1										
SUPPORT-EQUIP		31.7										
FLIGHT TEST		7.5										
TOOLING/EAP		50.0										
ICS		18.3		4.2								
INSTALL		5.1		0.2								
OGC		0.5										
<b>INSTALLATION OF HARDWARE</b>												
FY-90 517 KITS	[517]	65.5										
FY-92 14 KITS	[14]	2.6										
FY-93 8 KITS	[8]	0.8										
TOTAL INSTALL	539	68.9										
TOTAL COST (BP-1100)	539	412.6		4.5								0.2
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-3190 SCNS

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			535	24.9
KITS NONRECUR			4	14.4
EQUIPMENT			[535]	133.1
EQUIP NONREC			[4]	17.2
CHANGE ORDERS				8.6
DATA				6.5
SIM/TRAINER			[5]	26.1
SUPPORT-EQUIP				31.7
FLIGHT TEST				7.5
TOOLING/EAP				50.0
ICS				22.5
INSTAL				5.4
OGC				0.5
INSTALLATION OF HARDWARE				
FY-90 517 KITS			[517]	65.5
FY-92 14 KITS			[14]	2.6
FY-93 8 KITS			[8]	0.8
TOTAL INSTALL			539	68.9
TOTAL COST (BP-1100)			539	417.3

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 24 Months

Follow-On Lead Time: 9 Months

#### Milestones

	FY-90	FY-91	FY-92	FY-93	FY-94	FY-95	FY-96
Contract Date (Month/CY)	12/89		06/93	09/94			
Delivery Date (Month/CY)	12/89		06/94	06/95			

#### Installation Schedule

	FY-90	FY-91	FY-92	FY-93	FY-94	FY-95	FY-96
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	1 14 27 37 31	31 39 48 37 41	51 52 46 42 53	23 24 28 25 19	11 8 4 8 4	3 3 2 3 2	2 2 3 3 2
Output	1 11 21 35 31	31 41 46 46 42	53 53 46 42 53	22 22 28 28 18	15 15 2 8 4	3 3 3 3 3	2 2 3 3 2

02/15/2000

FY 2001 PBR

Modification Title and No: HF AUTO COMM PROCESSOR (ACP) MN-3353

Models of Aircraft Affected: C-130E/H

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0401115F Team MOBIL

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-130UNCLASSIFIED  
MODIFICATION OF AIRCRAFT**Description/Justification**

This modification supports the Airlift Mobility Command's Command and Control (C2) system upgrade. It, along with several additional multiple weapon system mods, provide the enhancements and upgrades to the airborne segment of the AMC C2 system upgrade. Specifically this modification improves the performance of the AN/ARC-190 HF radio by adding automatic channel scanning, automatic addressing with address protection, channel evaluation and frequency management. Also jam resistance/avoidance through slow frequency hopping will be provided. A total of 656 installs for ACS will be accomplished (SCNS only). Group A deltas from the basic ACP kit are indicated on the change order line. FY98 buy of 43 Gp A was necessitated by MDS changes & non-retiring A/C. A total of 306 Gp B were anticipated to be provided at no cost--excess from other platforms. 78 Gp B were actually provided. The remaining 46 will be obtained from retiring aircraft at no cost to the mod. Buys in FY98-99 are for the 271 Gp B outstanding. The first 20 A/C were performed at O&I level. KP & TI account for 13 of the installs & the remaining 7 A/C were traditional installations. Breakdown -- ACC: 12 E, 7 ECE, 9 HCP, 14 ECH; AETC: 45 E, 4 MCP, 3 MCH; AFMC: 1 ECH; AFRC: 35 E, 73 H, 5 HCN, 5 HCP, 5 MCP, 10 WCH; AFSOC: 4 E, 17 MCP, 8 ACH, 21 MCH; AMC: 50 E, 40 H; ANG: 89 E, 121 H, 9 ECE, 8 HCN, 9 HCP, 7 LCH; PACAF: 7 E, 20 H; USAF: 18 E Qty of 608 in FY's 95-97 on the Change Order line is for changes necessary for ACP to work on SCNS aircraft and is applicable only to SCNS equipped aircraft. PMD: 0924(1)/T3353.

Aircraft Breakdown: Active 278, Reserve 133, ANG 245

**Development Status**

N/A.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	643	5.5										
KITS NONRECUR	13	0.4										
EQUIPMENT	[406]	13.6	[113]	2.3								
EQUIP NONREC	[113]	1.0										
CHANGE ORDERS	[608]	9.0										
DATA		7.8			[12]	2.2						
SIM/TRAINER		1.3										
SUPPORT-EQUIP		0.6		0.0								
OGC		0.0										
FLIGHT TEST												
INSTALLATION OF HARDWARE												
FY-90	[56]	0.5										
FY-91	[36]	0.5										
FY-92	[322]	3.7	[95]	0.9	[60]	0.5						
FY-93												
FY-94												
FY-98												
TOTAL INSTALL	414	4.7	95	0.9	60	0.5	87	0.7				
TOTAL COST (BP-1100)	656	43.8		3.2		2.7						

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-3353 HF AUTO COMM PROCESSOR (ACP)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					643			5.5
KITS NONRECUR					13			0.4
EQUIPMENT					[519]			15.9
EQUIP NONREC					[13]			1.0
CHANGE ORDERS					[608]			9.0
DATA								7.8
SIM/TRAINER					[12]			2.2
SUPPORT-EQUIP								1.3
OGC								0.6
FLIGHT TEST								0.0
INSTALLATION OF HARDWARE								
FY-90 56 KITS							[56]	0.5
FY-91 36 KITS							[36]	0.5
FY-92 349 KITS							[417]	4.6
FY-93 68 KITS							[60]	0.5
FY-94 104 KITS							[44]	0.4
FY-98 43 KITS							[43]	0.3
TOTAL INSTALL							656	6.7
TOTAL COST (BP-1100)							656	50.3

(Totals may not add due to rounding)

Method of Implementation: COMBINATION

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

#### Milestones

	FY-90	FY-91	FY-92	FY-93	FY-94	FY-95	FY-96
Contract Date (Month/CY)	06/90	09/91	09/92	12/92	09/94		
Delivery Date (Month/CY)	06/91	06/92	06/93	09/93	06/96		

#### Installation Schedule

rule	FY-90	FY-91	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97
Quarters	1	2	3	4	1	2	3	4
Input	2	3	4	1	2	3	4	1
Output	3	4	1	2	3	4	1	2
	</							

02/15/2000

FY 2001 PBR

Modification Title and No: AIRLIFT DEFENSIVE SYSTEMS MN-3455

Models of Aircraft Affected: C-130, E, H

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0401115F Team MOBIL

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-130

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

**Description/Justification**

The C-130 users have had long standing mission need for electronic warfare defensive systems which will improve aircrew survivability. The electronic warfare defensive systems will consist of a missile warning receiver, and a flare and chaff dispenser. PMD: 9246(2) C-MNS directed installation of ALQ-131 pod on 19 C-130 (AWADS) and 10 AFRES C-130H aircraft. All ALQ-131 installs occurred in FY96/1. Initial kits for the program were accomplished under a CMNS. The follow-on is a full-up installation kit which requires a longer leadtime. Numerous aircraft configurations have resulted in the production of several kit types whose hardware and installation costs vary significantly. FY99/00 kits procured - some kits showing installed before delivery date, therefore, causing total installation time to take 5 quarters. The reason for this deviation is because a portion of these kits are small conversion kits used to convert AFRC acft from ALE-40 to ALE-47. Leadtime and install time is very short compared to the full up kits. 24-month lead time is based on the long-lead, full up kits. Conversion kits cost less than the full-up kits. FY97 retrofit dollars is for additional hardware to retrofit 17 'snow storm' acft. FY99-00 Change order: fleetwide processor upgrade for AAR-47. FY01-FY05 Change order: Fleetwide sensor upgrade for AAR-47.

Aircraft Breakdown: Active 166, Reserve 113, ANG 153

**Development Status**

N/A.

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

AWAITING BTR

FLIGHT TEST

OGC

KIT REPLENISHMENT

RETROFIT

T.O. Printing

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
		2.3										
297	11.3		81	2.1	51	2.1	3	0.2				
[1]	3.1											
[297]	39.1		[81]	6.6	[51]	5.0	[3]	0.5				
[1]	0.1			1.2		1.0	7.7	6.5	7.5			
	1.2			2.0		2.0	1.9					
	0.4					1.0	1.5	2.0	0.7			
[11]	0.3					5.5						
	6.6											
	0.4											
	1.4											
	0.0											
[17]	1.0											
	0.1											
				0.2			1.1	1.5				

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-3455 AIRLIFT DEFENSIVE SYSTEMS

Projected Financial Plan Continued

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
INSTALLATION OF HARDWARE												
FY-92	18 KITS	[18]		1.7								
FY-93	30 KITS	[30]		2.2								
FY-94	102 KITS	[82]	[20]	0.5								
FY-95	8 KITS	[8]		0.5								
FY-96	12 KITS	[12]		1.4								
FY-97	81 KITS		[41]	3.3	[23]	1.0	[17]	0.5				
FY-98	46 KITS		[5]	0.1	[41]	2.4	[56]	3.8				
FY-99	81 KITS				[25]	0.7	[8]	0.2	[43]	3.6		
FY-00	51 KITS										[3]	0.3
FY-01	3 KITS											0.3
TOTAL INSTALL		150	11.3	66	4.0	89	4.0	81	4.4	43	3.6	3
TOTAL COST (BP-1100)		297	76.3	81	14.2	51	20.9	3	17.3	13.6		8.6
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-3455 AIRLIFT DEFENSIVE SYSTEMS

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								2.3
PROCUREMENT (3010)								
INSTALL KITS					432	15.7		
KITS NONRECUR					[1]	3.1		
EQUIPMENT					[432]	51.3		
EQUIP NONREC					[1]	0.1		
CHANGE ORDERS	5.0			2.2		32.3		
DATA						4.2		
SIM/TRAINER					[11]	0.3		
SUPPORT-EQUIP						11.9		
AWAITING BTR						5.5		
FLIGHT TEST						0.4		
OGC						1.9		
KIT REPLENISHMENT						0.0		
RETROFIT					[17]	1.0		
T.O. Printing						2.8		
INSTALLATION OF HARDWARE								
FY-92 18 KITS					[18]	1.7		
FY-93 30 KITS					[30]	2.2		
FY-94 102 KITS					[102]	6.1		
FY-95 8 KITS					[8]	0.5		
FY-96 12 KITS					[12]	1.4		
FY-97 81 KITS					[81]	4.8		
FY-98 46 KITS					[46]	2.5		
FY-99 81 KITS					[81]	4.4		
FY-00 51 KITS					[51]	3.8		
FY-01 3 KITS					[3]	0.3		
TOTAL INSTALL					432	27.7		
TOTAL COST (BP-1100)		5.0		2.2	432	158.2		
(Totals may not add due to rounding)								

Method of Implementation: DEPOT FIELD TEAM

Initial Lead Time: 9 Months

Follow-On Lead Time: 24 Months

**Milestones**

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)	03/92	12/92	12/93	09/95	06/97	06/97	12/97	12/98	12/99	12/00	12/00	12/02
Delivery Date (Month/CY)	12/92	12/93	12/94	03/96	12/97	06/98	12/99	12/00	12/01	12/02		

**Installation Schedule**

UNCLASSIFIED

(Continued)

	FY-92				FY-93				FY-94				FY-95				FY-96				FY-97				FY-98				FY-99			
	Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
Input						3	5	5	5	8	8	7	7	12	12	12	13	24	5	6	6	6	6	6	6	17	17	16	16			
Output						3	5	5	5	8	8	7	7	12	12	12	13	24	5	6	6	6	6	6	6	17	17	16	16			
	FY-00				FY-01				FY-02				FY-03																			
	Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4															
Input	23	22	22	22	20	20	20	21	11	11	11	10	3																			
Output	23	22	22	22	20	20	20	21	11	11	11	10	3																			



02/15/2000

FY 2001 PBR

Modification Title and No: ENGINES MN-6040

Models of Aircraft Affected: C-130H

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: SA-ALC Kelly AFB, San Antonio, TX

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-130 Class P

PE 0401115F Team MOBIL

**Description/Justification**

This program converts up to 66 T56-7 and T56-14C engines to T56-15 engines. The result will be a significant increase in engine performance and reliability. Four QEC configurations are involved: basic-15 configuration with and without oil cooler augmentation; and SOF-15 configuration with 60/90 KVA generator with and without oil cooler augmentation. Based on future contract award, per engine cost and quantity to be adjusted accordingly. Group A and Group B are not equal in all fiscal years because the 11 ANG T56-14C engines that were recently incorporated into this modification program already have the required engine kits. Leadtime and delivery date is based on receipt of the engine kits. Schedule shows early input because QEC kits will be brought in early for overhaul. QEC modification kits will be installed as they are received. When engine kits are received, QEC and engine kits will be installed/integrated together to produce ready for install (RFI) engines to be delivered to C-130H units.

Aircraft Breakdown: Active 35, Reserve 13, ANG 18

**Development Status**

N/A.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS					11	2.6			11	2.2	14	2.5
KITS NONRECUR												
EQUIPMENT					[9]	3.3			[11]	4.0	[10]	3.6
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER					[11]	0.1			[11]	0.1	[14]	0.1
SUPPORT-EQUIP												
OGC												
INSTALLATION OF HARDWARE												
FY-00 11 KITS					[11]	0.1						
FY-02 11 KITS									[11]	0.1		
FY-03 14 KITS											[14]	0.1
FY-04 15 KITS												
FY-05 15 KITS												
TOTAL INSTALL					11	0.1			11	0.1	14	0.1
TOTAL COST (BP-1100)					11	6.0			11	6.4	14	6.4

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-6040 ENGINES  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDTE&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS	15	2.5	15	2.1			66	11.8
KITS NONRECUR								
EQUIPMENT	[10]	3.6	[15]	4.0			[55]	18.6
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP	[15]	0.1	[15]	0.1			[66]	0.3
OGC								
INSTALLATION OF HARDWARE								
FY-00 11 KITS							[11]	0.1
FY-02 11 KITS							[11]	0.1
FY-03 14 KITS							[14]	0.1
FY-04 15 KITS	[15]	0.2					[15]	0.2
FY-05 15 KITS			[15]	0.2			[15]	0.2
TOTAL INSTALL	15	0.2	15	0.2			66	0.7
TOTAL COST (BP-1100)	15	6.4	15	6.4			66	31.5
(Totals may not add due to rounding)								

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 9 Months

Follow-On Lead Time: 9 Months

**Milestones**

	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06
Contract Date (Month/CY)	05/00	10/01	10/02	10/03	10/04	10/04	
Delivery Date (Month/CY)	02/01	07/02	07/03	07/04	07/04	07/05	

**Installation Schedule**

	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	11		11	14	15	15	
Output			11	2	3	3	4

02/15/2000

FY 2001 PBR

Modification Title and No: ALR-69 (RWR) MN-8220

Models of Aircraft Affected: C-130E/H

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: WR-ALC Warner Robins AFB Warner Robins, GA

Appropriation: Aircraft Procurement, Air Force  
CLC: C-130

PE 0401115F Team MOBIL

**Description/Justification**

CSAF validated C-MNS implemented by SAF/AQQ 25/2282 Msg PMD. Aircrews flying missions in support of Provide Promise are being subjected to an increasing level of electronic threats which need to be modified so not to impact our worldwide airlift mission PMD 2264(3). Installs Radar Warning Receiver, RWR, on 366 C-130 aircraft. Provides airborne warning of all AAA, interceptors, and surface-air threats. Completes C-130 fleet for all aircraft already equipped with Airlift Defensive System. FY95 - ANG provided 2 group B as GFE at no cost to the mod program. Kit unit found Group B assets that belonged to the C-130 RWR program, that's why FY98 and FY99 group B costs are low.

Aircraft Breakdown: Active 122, Reserve 112, ANG 218

**Development Status**

N/A.

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

OGC

FLT TEST

T.O. Printing

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
81	4.1	2	0.2		33	2.2
2	4.1					
[79]	15.2	[2]	0.3		[33]	11.9
[2]	0.6					
	1.9					
	1.4			0.5		
[2]	2.8					
	6.8		0.3			1.3
	0.0		0.1	0.0		
	0.0					
	0.0					

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-8220 ALR-69 (RWR)

Projected Financial Plan Continued

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
INSTALLATION OF HARDWARE												
FY-94	39	KITS	[39]	3.9								
FY-95	27	KITS	[27]	1.4								
FY-96	16	KITS	[13]	1.2								
FY-98	1	KITS				0.4						
FY-99	2	KITS	[1]	0.1								
FY-03	33	KITS	[1]	0.1								
FY-04	28	KITS										
FY-05	24	KITS										
FY-06	72	KITS										
FY-07	50	KITS										
FY-08	12	KITS										
FY-09	60	KITS										
FY-10	60	KITS										
FY-11	28	KITS										
TOTAL INSTALL	79		5	0.5	1	0.1					33	15.5
TOTAL COST (BP-1100)	83		2	1.3		0.6						

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-8220 ALR-69 (RWR)

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS	28	24	21.8	31.9
KITS NONREC				4.1
EQUIPMENT	[28]	[24]	[282]	[448]
EQUIP NONREC				163.1
CHANGE ORDERS				[2]
DATA				0.6
SIM/TRAINER				1.9
SUPPORT-EQUIP	1.4	1.5	9.7	20.9
OGC				0.1
FLT TEST				0.0
T.O. Printing				0.0
INSTALLATION OF HARDWARE				
FY-94				[39]
FY-95				[27]
FY-96				[16]
FY-98				[1]
FY-99				[2]
FY-03		3.0		[33]
FY-04			2.6	[28]
FY-05			2.3	[24]
FY-06			7.1	[72]
FY-07			5.0	[50]
FY-08			1.2	[12]
FY-09			6.3	[60]
FY-10			6.4	[60]
FY-11			3.0	[28]
TOTAL INSTALL	33	3.0	33.9	452
TOTAL COST (BP-1100)	28	13.7	282	452
(Totals may not add due to rounding)		15.3	181.5	271.4

Method of Implementation: COMBINATION

Initial Lead Time: 2 Months

Follow-On Lead Time: 24 Months

Milestones

	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07	FY-08
Contract Date (Month/CY)	04/94	06/95	09/96		06/98					12/02	12/03	12/04	12/05	12/06	12/07
Delivery Date (Month/CY)	06/94	12/95	03/97		12/98					12/04	12/05	12/06	12/07	12/08	12/09
Contract Date (Month/CY)	FY-09	FY-10	FY-11	FY-12	FY-13										
Delivery Date (Month/CY)	12/08	12/09	12/10	12/11	12/12										

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UNCLASSIFIED

(Continued)

**UNCLASSIFIED**

(Continued)

02/15/2000

FY 2001 PBR

Modification Title and No: AERSPACE RESCUE AND RECOVERY MN-8424

Models of Aircraft Affected: HC130

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0207224F

Team AIR

UNCLASSIFIED  
MODIFICATION OF AIRCRAFTExhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-130**Description/Justification**

This Chief of Staff directed program converts 10 C-130 aircraft to a combat rescue (HC-130P) configuration. The program is required to provide adequate HC-130N/P force structure to support world-wide rescue requirements. A contract to convert 1 C-130E was awarded in FY98. An additional C-130E will be converted beginning in FY99. The remaining conversions will use WC-130Hs pending aircraft availability. Installation funds are not programmed separately because each nose-to-tail conversion will be treated as a tail installation due to NRE required to resolve MDS and aircraft-specific differences. Costs vary per aircraft based on these same differences. AFRC: 1 E TO HCP, 4 WC to HCP; AETC: 1 E to HCP, 1 WC to HCP; ACC: 3 WC TO HCP

Aircraft Breakdown: Active 5, Reserve 5, ANG 0

**Development Status**

N/A.

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
INSTALL KITS	1	4.4	1	3.4	1	3.5
KITS NONRECUR			1	3.6	1	3.7
EQUIPMENT						
EQUIP NONREC	[1]	2.3	[1]	1.8	[1]	2.8
CHANGE ORDERS	[1]	0.1		0.3		0.5
DATA		0.4				
SIM/TRAINER						
SUPPORT-EQUIP						
FLIGHT TEST		0.3		0.3		0.3
OGC		0.6		0.4		
INSTALLATION OF HARDWARE						
FY-98						
1 KITS						
FY-99						
1 KITS						
FY-00						
1 KITS						
FY-01						
1 KITS						
FY-02						
1 KITS						
FY-03						
2 KITS						
FY-04						
2 KITS						
FY-05						
1 KITS						
TOTAL INSTALL						
	1	8.1	1	6.7	1	7.2
TOTAL COST (BP-1100)	1	8.1	1	6.4	1	7.3
(Totals may not add due to rounding)						14.8

UNCLASSIFIED

Fact Sheet: C-130 MN-8424 AERSPACE RESCUE AND RECOVERY

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS	2	18.8	1	9.4	10	55.4
KITS NONRECUR						
EQUIPMENT	[2]	12.9	[1]	6.4	[10]	36.9
EQUIP NONREC					[1]	0.1
CHANGE ORDERS						3.8
DATA		1.0		0.5		
SIM/TRAINER						
SUPPORT-EQUIP		0.5		0.3		2.3
FLIGHT TEST						1.6
OGC						

INSTALLATION OF HARDWARE

FY-98	1	KITS	[1]	
FY-99	1	KITS	[1]	
FY-00	1	KITS	[1]	
FY-01	1	KITS	[1]	
FY-02	1	KITS	[1]	
FY-03	2	KITS	[2]	
FY-04	2	KITS	[2]	
FY-05	1	KITS	[1]	
TOTAL INSTALL	2		1	10

TOTAL COST (BP-1100) 2 33.2 1 16.5 10 100.1

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 13 Months

Follow-On Lead Time: 12 Months

Milestones

Contract Date (Month/CY)	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06
Delivery Date (Month/CY)	08/98	06/99	06/00	06/01	12/00	12/01	12/02	12/03	12/04	12/05

Installation Schedule

Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Input																
Output																
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Input																
Output																



PE 0401115F Team MOBIL

**DESCRIPTION OF WORK/REPAIR**  
This FLIGHT SAFETY modification is a follow-on bleed air duct replacement. Safety mod T8016S replaced 5 critical ducts. Nov 95 Bleed Air Duct Risk Assessment identified 4 additional ducts which need replacement with inonel ducts due to potential risk of failure and resulting collateral damage. (Group A only kit buy). This is a non-developmental acquisition. There is no change to duct fit or function. Only the material is changed. AFR: 30 E, 8 ME, 47 H, 10 WH, 4 HN, 4 HP, 5 MP; ANG: 72 E, 8 EE, 93 H, 4 LH, 3 HN, 7 HP; PACAF: 18 H, 13E; USAFE: 19 E; AMC: 49 E, 29 H; ACC: 1 E, 7 EE, 14 EH, 9 HP; AETC: 44 E, 3 MH, 4 MP; AFSOC: 4 E, 6 ME, 8 AH, 21 MH, 19 MP, 12 AU; AFMC: 1 E, 1 NH, 1 NE, 1 EH

Aircraft Breakdown: Active 284, Reserve 108, ANG 187

N/A.

PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)											
PROCUREMENT (3010)											
75	0.5	123	0.8	307	1.8	74	1.1				
KITS NONRECUR											
EQUIPMENT											
EQUIP NONREC											
CHANGE ORDERS											
DATA											
SIM/TRAINER											
SUPPORT-EQUIP											
OGC											
INSTALLATION OF HARDWARE											
		[2]	0.0	[73]	0.4						
				[123]	0.6						
						[307]	1.3			[74]	0.8
		2	0.0	196	1.0	307	1.3	74	0.8		
		123	0.8	307	2.8	74	2.5				
75	0.5	123	0.8	307	2.8	74	2.5				
TOTAL COST (BP-1100)											
(Totals may not add due to rounding)											

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-8448 BLEED AIR DUCT REPLACEMENT  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				579 4.3
KIT'S NONRECUR				
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
OGC				
INSTALLATION OF HARDWARE				
FY-98 75 KITS			[75]	0.4
FY-99 123 KITS			[123]	0.6
FY-00 307 KITS			[307]	1.3
FY-01 74 KITS			[74]	0.8
TOTAL INSTALL			579	3.1
TOTAL COST (BP-1100)			579	7.4

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 12 Months Follow-On Lead Time: 12 Months

Milestones

	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	06/98	12/98	12/99	12/00	12/01
Delivery Date (Month/CY)	06/99	12/99	12/00	12/01	

Installation Schedule

	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3
Input		2	28 45 58 65	74 78 80 75	25 20 18 11
Output		2	28 45 58 65	74 78 80 75	25 20 18 11

02/15/2000

FY 2001 PBR

Modification Title and No: INSTALLATION OF AN/APN-241 MN-8455

Models of Aircraft Affected: C-130-H, HC130P

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0401115F Team MOBIL

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-130

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

**Description/Justification**

Installation of Northrop/Grumman Low Power Color Radar (AN/APN-241) on 4 ANG LC-130H (FY97), 5 HC-130Ps at Moody AFB, and 3 Tanker Conversion HC-130Ps aircraft (2 active, 1 AFRC). On LC-130Hs, in conjunction with installation of the APN-241, the mod adds electronic flight instruments and satellite communications systems. On HC-130Ps the mod installs the APN-241 and removes the ARD-17 aerial tracker system, the APX-65 interrogator system, and Cook radome, and replaces the Fulton radomes with bullet nose radomes. Provides interim contract support for the AN/APN-241 until long term strategy is determined with AMP via SORAP. All Tanker Conversions HC-130Ps are being categorized as trial installs. One trial install in FY00 is required for the HC-130Ps at Moody AFB.

Aircraft Breakdown: Active 6, Reserve 2, ANG 4

**Development Status**

N/A.

**Projected Financial Plan**

RDT&E (3600)

**PROCUREMENT (3010)**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
INSTALL KITS						
KITS NONRECUR	4	0.2	1	0.1	4	0.4
EQUIPMENT			1	1.0	2	0.6
EQUIP NONREC	[1]	0.4	[4]	1.8		
CHANGE ORDERS	[4]	4.6	[1]	0.4	[2]	0.3
DATA						
SIM/TRAINER						
SUPPORT-EQUIP						
OGC		0.5		0.1		0.1
T.O. Printing		0.0		0.0		
ICS				1.6		1.4
FLIGHT TEST		0.1				
INSTALLATION OF HARDWARE						
FY-97						
4 KITS	[4]	0.2				
FY-99			[1]	0.1		
2 KITS			[1]			
FY-00					[5]	0.4
6 KITS					5	0.4
TOTAL INSTALL	4	0.2	1	0.1	2	0.4
TOTAL COST (BP-1100)	4	5.9	2	3.8	6	4.5
(Totals may not add due to rounding)						0.4

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-8455 INSTALLATION OF AN/APN-241  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				5
KITS NONRECUR				7
EQUIPMENT				[5]
EQUIP NONREC				[7]
CHANGE ORDERS				5.4
DATA				0.4
SIM/TRAINER				
SUPPORT-EQUIP				
OGC				0.7
T.O. Printing				0.0
ICS				3.0
FLIGHT TEST				0.1
INSTALLATION OF HARDWARE				
FY-97 4 KITS				[4]
FY-99 2 KITS				[2]
FY-00 6 KITS				[6]
TOTAL INSTALL				12
				0.7
TOTAL COST (BP-1100)				12
				14.7

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 8 Months Follow-On Lead Time: 12 Months

**Milestones**

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	07/97	10/98	06/00			
Delivery Date (Month/CY)	03/98	06/99	06/01			

**Installation Schedule**

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4
Input		1 2 1	1	1 1	1 1	
Output		1 2	1	1	1 2	2

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: IP1310 REPLACEMENT MN-8516  
 Models of Aircraft Affected: SOF C-130  
 Center: WR-ALC Warner Robins AFB Warner Robins, GA  
 Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: C-130  
 PE 0404011F Team INFO

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

**Description/Justification**

To provide a suitable and sustainable display indicator for the ALR-69 system. The IP1310 Azimuth Indicator has been used for over 25 years. It's Cathode Ray Tube (CRT) provides the aircrews with visual indications of the threats. The CRT has a high failure rate and is now very expensive to replace upon failure. The IP1310 Indicators are very difficult for aircrews to read in direct sunlight and do not meet Night Vision Imaging System (NVIS) requirements. The IP1310 will be replaced with an ElectroLuminescent Flat Panel display (ID-2554). The new display will increase reliability (from 3500 to 14,000 hours MTBF), decreased spares, maintenance flow days, and repair costs. It will also meet all NVIS requirements and is fully sunlight readable. A cost benefit analysis indicates an annual saving of about \$2.5M.

Aircraft Breakdown: Active 99, Reserve 0, ANG 0

**Development Status**

A Level III procurement data package will be delivered in Jun 00 for production of this hardware.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT					50	1.3		49		1.0		
EQUIP NONREC						0.1				0.0		
CHANGE ORDERS						0.1						
DATA						0.2						
SIM/TRAINER					[4]	0.1						
SUPPORT-EQUIP						0.1						
TOTAL COST (BP-1100)					50	1.8		49		1.0		

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-8516 IP1310 REPLACEMENT  
(Continued)

	FY-04 QTY	COST	FY-05 QTY	COST	TO COMP QTY	COST	TOTAL QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KIT'S NONRECUR							99	2.3
EQUIPMENT								0.1
EQUIP NONREC								0.1
CHANGE ORDERS								0.2
DATA							[4]	0.1
SIM/TRAINER								0.1
SUPPORT-EQUIP								
TOTAL COST (BP-1100)							99	2.8

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)	10/00	10/01		
Delivery Date (Month/CY)	10/01	10/02		

02/15/2000

FY 2001 PBR

Modification Title and No: NVIS MN-8520

Models of Aircraft Affected: HC-130 N/P

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: WR-ALC Warner Robins AFB Warner Robins, GA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-130 Class P

PE 0401115F Team MOBIL

# Description/Justification

Provide a less expensive mod kit for Night Vision Imaging System (NVIS) mission capability for C-130 combat rescue aircraft. One Phase program: Contractors will compete in a Technically Acceptable Price/Performance Trade-off (TAPPT) Source Selection. This will lead to selection of the kit considered to be best value/cost effective for the AF and award of a contract for the selected prototype kit for development and production of follow-on kits. The kit costs and installation costs have variances due to the differences in the type of kits and the various aircraft in which they will be installed. Some of the aircraft already have portions of this mod accomplished, and, therefore, only need certain portion of the full kits and/or installation. AFRC = 4 HPs, 4 HNs ANG 1 HP

This program is partially funded, awaiting funding from MAJCOMs for kit production past these original 9 kits (hence the OGC in out-years).

Aircraft Breakdown: Active 0, Reserve 8, ANG 1

## Development Status

N/A.

## Projected Financial Plan

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS					2	0.3						
KITS NONRECUR			1	0.7								
EQUIPMENT					[2]	0.0						
EQUIP NONREC			[1]	0.1								
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
WARRANTY												
FLIGHT TEST												
OGC		0.4		0.1		0.4		0.1				
INSTALLATION OF HARDWARE												
FY-99					[6]	0.2	[1]	0.0				
1 KITS							[2]	0.0				
FY-00												
2 KITS												
TOTAL INSTALL					6	0.2	3	0.1				
TOTAL COST (BP-1100)		0.4	1	1.2	2	0.9		0.2				

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-8520 NVIS  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			2	0.3
KITS NONRECUR			1	0.7
EQUIPMENT			[2]	0.0
EQUIP NONREC			[1]	0.1
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
WARRANTY				
FLIGHT TEST				0.1
OGC				1.3
INSTALLATION OF HARDWARE				
FY-99 1 KITS			[7]	0.2
FY-00 2 KITS			[2]	0.0
TOTAL INSTALL			9	0.2
TOTAL COST (BP-1100)			3	2.7

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 2 Months

Follow-On Lead Time: 2 Months

Milestones

	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	01/00	01/00	01/00	
Delivery Date (Month/CY)	03/00	03/00	03/00	

Installation Schedule

	FY-98	FY-99	FY-00	FY-01
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input			1 1 4 3	
Output			1 1 4 3	



02/15/2000

FY 2001 PBR

Modification Title and No: ENHANCED TCAS (TCAS II) MN-8526

Models of Aircraft Affected: C-130E, H, HCP

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0401115F Team MOBIL

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-130UNCLASSIFIED  
MODIFICATION OF AIRCRAFTDescription/Justification

This modification is required by the Air Force Navigation and Safety Master Plan (Nav/Safety) and Global Air Traffic Management (GATM) mandates which are necessary for worldwide, unrestricted airspace access. The Secretary of Defense directed installation of an airborne collision avoidance system in response to the findings of the April 1996 CT-43 crash. Other C-130s have already been modified with this system, hence this modification will increase commonality across the fleet. This Enhanced Traffic Alert & Collision Avoidance System (ETCAS) modification program meets all these requirements. Kits are phase-delivered. Leadtime is based on receipt of the Trial Install kits.

Aircraft Breakdown: Active 53, Reserve 47, ANG 87

Development Status

N/A

Projected Financial Plan

RDT&amp;E (3600)

## PROCUREMENT (3010)

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
INSTALL KITS	68	2.5	49	2.3	24	1.1
KITS NONREC	2	2.0	1	1.6	1	1.1
EQUIPMENT	[68]	10.8	[49]	7.3	[24]	3.8
EQUIP NONREC	[2]	0.3	[1]	0.1	[1]	0.2
CHANGE ORDERS						
DATA		0.2		0.3		0.2
SIM/TRAINER			[2]	1.6	[1]	0.3
SUPPORT-EQUIP		0.1		0.1		0.1
FLIGHT TEST		0.2		0.3		0.4
OGC		2.0		0.6		0.5
ICS						

## WARRANTY

## INSTALLATION OF HARDWARE

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
70 KITS						
50 KITS						
25 KITS						
36 KITS						
6 KITS						
TOTAL INSTALL	11	0.3	79	3.3	55	2.3
					36	1.6

TOTAL COST (BP-1100)	70	18.2	50	15.5	25	16.7	36	18.5	1.8	6	4.3
(Totals may not add due to rounding)											

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-8526 ENHANCED TCAS (TCAS II)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							181	8.2
KITS NONRECUR							6	7.0
EQUIPMENT							[181]	29.2
EQUIP NONREC							[6]	1.0
CHANGE ORDERS								
DATA								
SIM/TRAINER							[5]	1.6
SUPPORT-EQUIP								2.2
FLIGHT TEST								0.5
OGC								1.8
ICS								5.1
WARRANTY								11.1
INSTALLATION OF HARDWARE								
FY-98 70 KITS							[70]	2.9
FY-99 50 KITS							[50]	2.0
FY-00 25 KITS							[25]	1.0
FY-01 36 KITS							[36]	1.6
FY-03 6 KITS	[6]	0.3					[6]	0.3
TOTAL INSTALL	6	0.3					187	7.8
TOTAL COST (BP-1100)							187	75.4
(Totals may not add due to rounding)								

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 6 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)	06/98	12/98	10/99	10/00	10/02		
Delivery Date (Month/CY)	12/98	12/99	10/00	10/01	10/03		

**Installation Schedule**

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1
Output	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1

02/15/2000

FY 2001 PBR

Modification Title and No: INSTALLATION OF 3 RECORDER PARAMETERS MN-8558

Models of Aircraft Affected: C-130 (ALL EXCEPT MC-130H Center: WR-ALC Warner Robins AFB Warner Robins, GA

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-130 Class P

PE 0401115F Team MOBIL

# **Description/Justification**

This navigation safety modification installs group A integration to add 3 new parameters: fuel flow, turbine inlet temperature & synchrophaser & is in response to the C-130 BAR recommendation. Recent mishap investigations have cited these as critical deficiencies in completing their investigations. The group A for the additional parameters is under development via a COD reengineering task. It will require a trial install, kitproof & flight test. ACC: 1 E,14 ECH,9 HCP; AETC: 18 E, 2 NCH; AFSOC: 4E,6MCE Combat Talon, 8ACH Gunship, 19MCP Combat Shadow; AFRC: 31E, 8MCE combat talon, 56H-2, 23H-3, 10WCH, 4HCP Tanker, 5MCP Combat Shadow;AMC: 5E, 29H-1, 14H-3; ANG: 26E, 104H-2, 42H-3, 10LCH, 13HCN/P Tanker; PACAF: 4E, 18H-1.

Aircraft Breakdown: Active 151, Reserve 137, ANG 195

**Development Status**  
N/A.

## **Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS					3	0.0	180	2.9	240	3.8	59	0.9
KITS NONRECUR					1	0.2						
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA								0.0				
SIM/TRAINER												
SUPPORT-EQUIP												
FLIGHT TEST												
INSTALLATION OF HARDWARE												
FY-00 4 KITS							[4]	0.0	[180]	0.8	[240]	1.0
FY-01 180 KITS												
FY-02 240 KITS												
FY-03 59 KITS												
TOTAL INSTALL							4	0.0	180	0.8	240	1.0
TOTAL COST (BP-1100)					4	1.0	180	2.9	240	4.5	59	2.0

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-8558 INSTALLATION OF 3 RECORDER PARAMETERS

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							482	7.7
KITS NONRECUR							1	0.2
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.8
SIM/TRAINER								
SUPPORT-EQUIP								
FLIGHT TEST								0.0
INSTALLATION OF HARDWARE								
FY-00 4 KITS							[4]	0.0
FY-01 180 KITS							[180]	0.8
FY-02 240 KITS							[240]	1.0
FY-03 59 KITS	[59]	0.2					[59]	0.2
TOTAL INSTALL	59	0.2					483	2.0
TOTAL COST (BP-1100)		0.2					483	10.7

(Totals may not add due to rounding)

Method of Implementation: COMBINATION

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

Milestones

	FY-00	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)	03/00	03/01	12/01	12/02	
Delivery Date (Month/CY)	03/01	03/02	12/02	12/03	

Installation Schedule

	FY-00	FY-01	FY-02	FY-03	FY-04
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	2 2 2 2	2 2 2 2	60 60 60 60	60 60 60 60	59 59 59 59
Output					

UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-8561 SYNCHROPHASER WIRE (C-130)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							686	1.9
KITS NONRECUR							1	0.0
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.0
SIM/TRAINER								
SUPPORT-EQUIP								0.0
FLIGHT TEST								0.2
OGC								
INSTALLATION OF HARDWARE								
FY-00 197 KITS							[197]	3.7
FY-01 195 KITS							[195]	3.8
FY-02 235 KITS							[235]	4.6
FY-03 60 KITS	[60]	1.2					[60]	1.2
TOTAL INSTALL	60	1.2					687	13.3
TOTAL COST (BP-1100)		1.2					687	15.4

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 9 Months

Follow-On Lead Time: 3 Months

#### Milestones

	FY-00	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)	03/00	12/00	12/01	12/02	
Delivery Date (Month/CY)	12/00	03/01	03/02	03/03	

#### Installation Schedule

	FY-00	FY-01	FY-02	FY-03	FY-04
Quarters	1	2	3	4	1
Input	2	65	65	48	58
Output	2	65	65	48	58
					59
					59
					30
					30

PE 040115F Team MOBIL

(Continued)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					195			0.5
KITS NONRECUR								
EQUIPMENT					[195]			3.0
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.1
SIM/TRAINER								
SUPPORT-EQUIP								
OGC								0.2
MOD OF SPARES								0.1
INSTALLATION OF HARDWARE								
FY-00 33 KITS								[33] 0.5
FY-01 31 KITS								[31] 0.5
FY-02 66 KITS								[66] 1.0
FY-03 65 KITS								[65] 1.0
TOTAL INSTALL							195	3.0
TOTAL COST (BP-1100)							195	6.9

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 9 Months

Follow-On Lead Time: 3 Months

#### Milestones

	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)	03/00	12/00	12/01	12/02
Delivery Date (Month/CY)	12/00	03/01	03/02	03/03

#### Installation Schedule

	FY-00	FY-01	FY-02	FY-03
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	2 9 11 11	2 9 11 11	2 9 11 11	2 9 11 11
Output	2 9 11 11	2 9 11 11	2 9 11 11	2 9 11 11



02/15/2000

FY 2001 PBR

Modification Title and No: ALE-47 CHAFF AND FLARE DISPENSER MN-8577

Models of Aircraft Affected: MC-130P

Center: ASC - Wright Patterson AFB, OH

UNCLASSIFIED  
MODIFICATION OF AIRCRAFTExhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-130 Class P

PE 0404011F Team INFO

**Description/Justification**

Upgrade the current ALE-40, Chaff and Flare Dispensers System with the AN/ALE-47 Countermeasures Dispensing System (CMDS). The ALE-47 is a programmable, threat adaptive dispensing system designed to enhance aircraft survivability in an IR/RF threat environment.

Aircraft Breakdown: Active 24, Reserve 0, ANG 4

**Development Status**

Contract Award 2QFY01. (Aircraft breakout: 0 AFRES;4 ANG; 24 Active)

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS									24	0.4	3	0.0
KITS NONRECUR							1	1.2		0.9		
EQUIPMENT									[24]	1.2	[3]	0.1
EQUIP NONREC							[1]	0.1				
CHANGE ORDERS										0.1		0.8
DATA										0.1		
SIM/TRAINER									[1]	1.0	[1]	1.0
SUPPORT-EQUIP										0.2		0.2
ICS										0.1		0.1
INSTALLATION OF HARDWARE												
FY-01 1 KITS									[1]			
FY-02 24 KITS									[6]	0.7	[18]	2.0
FY-03 3 KITS											[3]	0.3
TOTAL INSTALL									7	0.7	21	2.3
TOTAL COST (BP-1100)							1	1.3	24	4.5	3	4.6

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-8577 ALE-47 CHAFF AND FLARE DISPENSER

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					27	0.4		
KITS NONRECUR					1	2.1		
EQUIPMENT					[27]	1.3		
EQUIP NONREC					[1]	0.1		
CHANGE ORDERS						0.9		
DATA						0.1		
SIM/TRAINER					[2]	2.0		
SUPPORT-EQUIP						0.3		
ICS						0.2		
INSTALLATION OF HARDWARE								
FY-01 1 KITS					[1]			
FY-02 24 KITS					[24]	2.6		
FY-03 3 KITS					[3]	0.3		
TOTAL INSTALL					28	2.9		
TOTAL COST (BP-1100)					28	10.4		

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 9 Months

Follow-On Lead Time: 9 Months

#### Milestones

	FY-01	FY-02	FY-03
Contract Date (Month/CY)	01/01	11/01	11/02
Delivery Date (Month/CY)	10/01	08/02	08/03

#### Installation Schedule

	FY-01			FY-02			FY-03		
Quarters	1	2	3	4	1	2	3	4	
Input					1	6	6	6	3
Output					1	6	6	6	3

PE 040115F Team MOBIL

## TOTAL COST (BP-1100)

UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-8626 C-130 SIMULATOR UPGRADE  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.4
SIM/TRAINER					[4]			16.0
SUPPORT-EQUIP								
TOTAL COST (BP-1100)								16.4

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 18 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-00	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)	03/00	01/01	01/02	01/03	
Delivery Date (Month/CY)	09/01	01/02	01/03	01/04	

**Installation Schedule**

	FY-00		FY-01		FY-02		FY-03		FY-04	
Quarters	1	2	3	4	1	2	3	4	1	2
Input					1	1	1		1	1
Output					1	1			1	

UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-99999A LOW COST SAFETY MODIFICATIONS

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RD&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
AIRCRAFT		0.0		0.0		9.5		11.4
TOTAL COST (BP-1100)		0.0		0.0		9.5		11.4

(Totals may not add due to rounding)

Method of Implementation:

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-93

Contract Date (Month/CY)

Delivery Date (Month/CY)

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: SERVICE BULLETINS MN-99999S  
 Models of Aircraft Affected: C-130  
 Center: WR-ALC Warner Robins AFB Warner Robins, GA  
 Appropriation: Aircraft Procurement, Air Force  
 CLC: C-130  
 PE 0401115F  
 Team MOBIL  
 Exhibit P3A Congressional

**Description/Justification**  
 Misc low cost mods for Service Bulletins (under \$900K). MN 8191, Maintenance Free Battery, the current battery will be replace by a sealed maintenance free battery.

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

**Development Status**  
 N/A.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
AIRCRAFT												
MN 8191	0.4						1.3		0.0			0.0
TOTAL COST (BP-1100)							1.3		0.0			0.0
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-99999S SERVICE BULLETINS  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
AIRCRAFT		0.0		0.0		9.5		10.8
MN 8191								0.4
TOTAL COST (BP-1100)		0.0		0.0		9.5		11.2

(Totals may not add due to rounding)

Method of Implementation:

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-94

Contract Date (Month/CY)  
Delivery Date (Month/CY)



02/15/2000

FY 2001 PBR

Modification Title and No: LOW COST MODIFICATIONS MN-99999X

Models of Aircraft Affected: C-130

Center: WR-ALC Warner Robins AFB Warner Robins, GA

UNCLASSIFIED

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-130

PE 0401115F Team MOBIL

**Description/Justification**

These are low cost (under \$900K each) modifications necessary to improve reliability, maintainability, safety and mission performance of the C-130 aircraft. In FY95: Traffic Collision Avoidance System, \$0.8M. FY97 = Sealed Lead Acid Battery (.048) and 823 PLS FY98 = Hung Paratrooper Retrieval System (1.079); FY99 = SCADC(.102) and PLS (.094)

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

**Development Status**

N/A.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT				0.1								
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
REFURB OF EMD ASSETS		1.8										
AIRCRAFT		1.1						1.9		0.0		0.0
AWAITING BTR												
PLS		0.8		0.1								
TOTAL COST (BP-1100)		3.7		0.2				1.9		0.0		0.0
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-99999X LOW COST MODIFICATIONS  
(Continued)

	FY-04	FY-05	TOTAL
	QTY COST	QTY COST	QTY COST
RD1&E (3600)			
PROCUREMENT (3010)			
INSTALL KITS			
KITS NONRECUR			0.1
EQUIPMENT			
EQUIP NONREC			
CHANGE ORDERS			
DATA			
SIM/TRAINER			
SUPPORT-EQUIP			
REFURB OF EMD ASSETS			1.8
AIRCRAFT	0.0	0.0	3.0
AWAITING BTR			0.9
PLS			
TOTAL COST (BP-1100)	0.0	0.0	5.8
(Totals may not add due to rounding)			

Method of Implementation:

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-92

Contract Date (Month/CY)  
Delivery Date (Month/CY)

02/15/2000

FY 2001 PBR

Modification Title and No: FM IMMUNITY MN-DC101

Models of Aircraft Affected:

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-130

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0401115F Team MOBIL

**Description/Justification**

This is not a New Start. FY00 funding for effort resulted from a Congressional Appropriations Committee plus-up for GATM efforts, one of which is FM Immunity. This modification provides protection from interference with FM broadcast ban adjacent to the aeronautical radio navigation band. This modification effort will reduce/eliminate the number of non-compliant aircraft and reduce the increased operational risk and operational restrictions placed on non-compliant aircraft by host nations.

Aircraft Breakdown: Active 165, Reserve 0, ANG 0

**Development Status**

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)					165	2.6						
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
TOTAL COST (BP-1100)					165	2.6						
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: C-130 MN-DC101 FM IMMUNITY  
(Continued)

	FY-04 QTY	COST	FY-05 QTY	COST	TO COMP QTY	COST	TOTAL QTY	COST
RD&E (3600)								
PROCUREMENT (3010)							165	2.6
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
TOTAL COST (BP-1100)							165	2.6

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 6 Months

Follow-On Lead Time: 0 Months

**Milestones**

	FY-00	FY-01
Contract Date (Month/CY)	03/00	
Delivery Date (Month/CY)	09/00	

## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: C-135			
	1999	2000	2001	2002	2003	2004
						2005
COST (In Mil)	\$290.392	\$446.602	\$328.232	\$341.681	\$291.533	\$292.976
						\$65.882

This line item funds modifications to the C-135 and KC-135 aircraft. The C-135 is a four engine aircraft used for long range cargo and passenger airlift and to support theater commanders. The four engine KC-135 provides air refueling through either the refueling boom or drogue. As a cargo aircraft, the KC-135 can carry 6 standard 463-L pallets. The primary modifications budgeted in FY01 are the Global Air Traffic Management (GATM) modification and the Avionics Modernization Program Pacer CRAG (Compass Radar and GPS). Other modifications are budgeted to enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

CLASS	MOD	MODIFICATION	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST	TOTAL
P-S	NR	TITLE								TO GO	PROG.
	99999A	LOW COST SAFETY MO	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5
TOTAL FOR CLASS P-S											
P	10402B	FUEL SAVINGS ADVISO	0.6								102.7
	16405X	SCOPE RELOCATION	0.1								0.3
	17403B	STANDARD FLIGHT DA	0.9	0.3	0.4	0.4					14.4
	2984X	NUCLEAR HARDENING	0.5	0.1							1.1
	3009E	C-135 REENGINE	3.0	97.0	0.1	61.4	55.8	142.0	4.3	11.5	862.8
	3009X	AUDIBLE COCKPIT WA	0.1								0.9
	3009Y	RELOCATE SV BOX	0.1								0.9
	3149F	FLIGHT DATA RECORD	15.1	15.9	33.3	19.9	4.2				103.0
	3150PC	PACER CRAG (COMPA	126.9	153.2	70.1						640.2
	3156	PACER LINK PH II	0.1								251.3
	3353	HF AUTO COMM PROC	6.4	0.3	1.4						29.1
	4310	INTERPHONE REPLACE	17.9	11.6	4.8						37.5
	48604B	INSTALLATION OF WIN	0.2								2.7

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 55	PAGE NO. 1
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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)			P-1 ITEM NOMENCLATURE: C-135					DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications								
COST (In Mil)		1999	2000	2001	2002	2003	2004	2005
		\$290.392	\$446.602	\$328.232	\$341.681	\$291.533	\$292.976	\$65.882

This line item funds modifications to the C-135 and KC-135 aircraft. The C-135 is a four engine aircraft used for long range cargo and passenger airlift and to support theater commanders. The four engine KC-135 provides air refueling through either the refueling boom or drogue. As a cargo aircraft, the KC-135 can carry 6 standard 463-L pallets. The primary modifications budgeted in FY01 are the Global Air Traffic Management (GATM) modification and the Avionics Modernization Program Pacer CRAG (Compass Radar and GPS). Other modifications are budgeted to enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

MOD CLASS	MOD NR	MODIFICATION TITLE	EY-99	EY-00	EY-01	EY-02	EY-03	EY-04	EY-05	COST TO GO	TOTAL PROG.
6030		REDUCED VERTICAL S	29.3	47.4	37.6	16.4					140.8
9702		8.33 KHZ VHF RADIO	12.8	16.6	51.3						80.7
9709		GLOBAL AIR TRAFFIC	48.4	25.0	78.5	208.9	217.3	144.9	55.6	203.1	981.7
9734		TURBINE ENGINE MONI			1.3	1.3					2.6
9999S		SERVICE BULLETINS	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1
9999X		LOW COST MODIFICATI	0.9	1.0	0.9	1.3	1.0	1.9	2.0		14.0
DC101		FM IMMUNITY			7.0						7.0
KC4218		HIGH RELIABILITY MAIN	1.9	1.3	1.3	0.8					13.3
KC4231		MULTIPOINT REFUELIN	6.4	4.2	16.1	10.7	3.5	4.2	4.0	77.8	193.5
SIM135		SIMULATOR UPGRADE	10.2	21.9	14.8	11.7	9.8				68.5
TAWS		TERRAIN AWARENESS	8.9	23.4	9.4	8.8					94.3
Z8888		REPROGRAMMINGS	0.1	27.4							29.7
TOTAL FOR CLASS P			290.9	446.8	328.4	341.7	291.6	293.0	65.9	292.4	3,673.3
TOTAL FOR AIRCRAFT C-135			291.0	446.9	328.5	341.8	291.7	293.1	66.0	292.5	3,673.8

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 55	PAGE NO. 2
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02/15/2000

FY 2001 PBR

Modification Title and No: STANDARD FLIGHT DATA RECORDER MN-17403B

Models of Aircraft Affected: C/KC-135

Center: OC-ALC - Tinker AFB Okla City, OK

PE 0401218F Team MOBIL

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-135UNCLASSIFIED  
MODIFICATION OF AIRCRAFT**Description/Justification**

This modification will incorporate a Standard Army-Navy-Air Force Flight Data Recorder (SFDR). It is a data collection system designed to provide aircraft structural analysis and other pertinent data. It will replace the existing MXU-553 Aircraft Structural Integrity Program (ASIP) recorder. FY95 installs were funded with FY93 nonrecurring dollars. Software changes do not cause a hardware change. A sampling of 25 aircraft were selected to collectively represent the data. Installation schedule driven by aircraft availability.

Aircraft Breakdown: Active 21, Reserve 1, ANG 3

**Development Status**

N/A

**Projected Financial Plan**

RDT&amp;E (3600)

## PROCUREMENT (3010)

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
INSTALL KITS	25	2.3				
KITS NONRECUR		1.5				
EQUIPMENT	[25]	2.8				
EQUIP NONREC		0.5				
CHANGE ORDERS						
DATA		2.3	0.0			0.3
SIM/TRAINER		1.7				
SUPPORT-EQUIP		1.0	0.3			
SOFTWARE		0.0	0.1	0.0		0.0
OGC						
INSTALLATION OF HARDWARE						
FY-93	[3]	0.1				
3 KITS						
FY-95	[4]	0.2				
8 KITS						
FY-96			[5]	[7]	[1]	
13 KITS			0.3	0.3	0.1	
FY-97						
1 KITS						
TOTAL INSTALL	7	0.3	5	7	1	0.1
			0.5	0.3	0.1	
TOTAL COST (BP-1100)	25	12.4	0.9	0.3	0.4	0.4

(Totals may not add due to rounding)

## Fact Sheet: C-135 MN-17403B STANDARD FLIGHT DATA RECORDER

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					25	2.3		
KITS NONRECUR						1.5		
EQUIPMENT					[25]	2.8		
EQUIP NONREC						0.5		
CHANGE ORDERS								
DATA								2.6
SIM/TRAINER								1.7
SUPPORT-EQUIP								1.3
SOFTWARE								0.2
OGC								
INSTALLATION OF HARDWARE								
FY-93							[3]	0.1
3 KITS								
FY-95							[8]	0.6
8 KITS								
FY-96							[13]	0.8
13 KITS								
FY-97							[1]	0.1
1 KITS								
TOTAL INSTALL					25			1.6
TOTAL COST (BP-1100)								
					25			14.4

(Totals may not add due to rounding)

**Method of Implementation: DEPOT/FIELD TEAM**

**Initial Lead Time: 6 Months**

**Follow-On Lead Time: 12 Months**

## Milestones

ICS	<u>FY-93</u>	<u>FY-94</u>	<u>FY-95</u>	<u>FY-96</u>	<u>FY-97</u>	<u>FY-98</u>	<u>FY-99</u>	<u>FY-00</u>	<u>FY-01</u>	<u>FY-02</u>
Contract Date (Month/CY)	12/92		03/95	12/95	12/97					
Delivery Date (Month/CY)	06/93		03/96	12/96	12/98					

### **Installation Schedule**

		<u>FY-93</u>		<u>FY-94</u>		<u>FY-95</u>		<u>FY-96</u>		<u>FY-97</u>		<u>FY-98</u>		<u>FY-99</u>		<u>FY-00</u>	
Rule	Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	Input						1				1					1	
	Output				1				1				1				1
		<u>FY-01</u>		<u>FY-02</u>													
	Quarters	1	2	3	4	1	2	3	4								
	Input	2	2	2	1	1											
	Output	2	2	3	3	1											



02/15/2000

FY 2001 PBR

Modification Title and No: C-135 REENGINE MN-3009E

Models of Aircraft Affected: KC-135

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-135

Center: OC-ALC - Tinker AFB Okla City, OK

PE 0401218F Team MOBIL

**Description/Justification**

Modifies KC-135E aircraft with more powerful, fuel efficient F108 (CFM-56) engines, allowing takeoff on shorter runways with higher gross weights. The cleaner, quieter F108 engines meet or exceed all noise and pollution standards. Over 25 other systems/sub-systems, including the landing gear, will extend the life of these aircraft. One kit on the equipment line equals 4 engines.

Aircraft Breakdown: Active 0, Reserve 15, ANG 20

**Development Status**

N/A

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

	PRIOR QTY	COST	FY-99 QTY	COST	FY-00 QTY	COST	FY-01 QTY	COST	FY-02 QTY	COST	FY-03 QTY	COST
INSTALL KITS	22	159.7			4	40.3			2	25.8	2	26.3
KITS NONRECUR		3.5										
EQUIPMENT	[22]	289.1			[4]	56.0			[2]	28.5	[2]	28.5
EQUIP NONREC												
CHANGE ORDERS		4.9										0.3
DATA		8.7				0.7				0.7		0.7
SIM/TRAINER		1.0										
SUPPORT-EQUIP		0.1				0.0		0.0		0.0		0.0
OGC												

**INSTALLATION OF HARDWARE**

	FY-93	FY-94	FY-96	FY-97	FY-00	FY-02	FY-03
15 KITS	[15]	13.6					
1 KITS	[1]	1.0					
4 KITS	[4]	6.3					
2 KITS			[2]			[4]	6.4
4 KITS							
2 KITS							
2 KITS							
2 KITS							
5 KITS							

TOTAL INSTALL

20	20.9	2	3.0		4	6.4
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TOTAL COST (BP-1100)

22	487.9	3.0	4	97.0	0.0	2	61.4	2	55.8
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(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-135 MN-3009E C-135 REENGINE  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS	5	66.0					35	318.0
KITS NONRECUR								3.5
EQUIPMENT	[5]	71.5					[35]	473.6
EQUIP NONREC								
CHANGE ORDERS		0.3						5.4
DATA		0.7						11.6
SIM/TRAINER								1.0
SUPPORT-EQUIP								0.2
OGC		0.0		0.0		0.0		
INSTALLATION OF HARDWARE								
FY-93	15	KITS					[15]	13.6
FY-94	1	KITS					[1]	1.0
FY-96	4	KITS					[4]	6.3
FY-97	2	KITS					[2]	3.0
FY-00	4	KITS					[4]	6.4
FY-02	2	KITS					[2]	3.5
FY-03	2	KITS					[2]	4.3
FY-04	5	KITS					[5]	11.5
TOTAL INSTALL	2	3.5	2	4.3	5	11.5	35	49.5
TOTAL COST (BP-1100)	5	142.0		4.3		11.5	35	862.8
(Totals may not add due to rounding)								

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 24 Months

Follow-On Lead Time: 24 Months

**Milestones**

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07
Contract Date (Month/CY)	01/93	04/94		04/96	04/97					04/02	04/03	04/04			
Delivery Date (Month/CY)	01/95	04/96		01/98	04/99					04/04	04/05	04/06			
Contract Date (Month/CY)															
Delivery Date (Month/CY)															

**Installation Schedule**

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
Input															
Output															

**Installation Schedule Continued**

	FY-01			FY-02			FY-03			FY-04			FY-05			FY-06			FY-07		
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Input					1	1	1	1					2	2	2	1	2	1	1		
Output	1					1	1	1	1				2	2	2	1	2	1	1		

UNCLASSIFIED

(Continued)

02/15/2000

FY 2001 PBR

Modification Title and No: FLIGHT DATA RECORDER & COCKPIT VOICE RECORDER MN-3149F

Models of Aircraft Affected: C/KC-135

Center: OC-ALC - Tinker AFB Okla City, OK

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-135

PE 0401218F Team MOBIL

#### Description/Justification

The Navigation and Safety Upgrade Program (Phase II) combines the C/KC-135 Navigation and Safety Upgrades on Air Force aircraft designated for passenger missions. These modifications includes Flight Data Recorder (FDR), Cockpit Voice Recorder (CVR), and Emergency Locator Transmitter (ELT). Acquisition through a system integration strategy with a common integration contract and concurrent installation is planned. Direction for implementation of AF Navigation and Safety Master Plan and Policy is contained in the 9 Sep 96 AF/XO. SAE/AQ memo 'SECDEF - Directed Navigation and Safety Modification', and policy guidance provided in a coordinated AF/XO, AF/SE, AF/XP, and SAF/AQ message, date Mar 97.

This Mod is baselined with MN 3150PC/Pacer CRAG and Block 30 Upgrade (TAWS, MN 3149F/Nav Safety).

The NRE in FY97, FY98 and FY99 are for KCR/T & KCE variants. FY01-02 NRE is for the DV/OSA/CINC/Special purpose aircraft variants, (CB/2ea, CC/3ea, EKC, ECE, ECN, KCA, NKCB, NKCE/2ea, OCB/2ea, and KCE/4ea). Change Order funding in FY02-03 is to cover hardware and software changes to the system. We expect the number of mandatory flight parameters to increase from 17 to approx 150. Also a second crash protected memory module is required, change circuit breakers to different power sources, Horizontal Stabilizer position inputs are to be recorded.

FY97 109 buy = 10ea (prototype, kitproof, and for installs that begin in FY98-3) and 99ea (production for installs that begin in FY99-4).

FY98 25 buy = FY00 production installs.

FY99 115 buy = FY00-01 production installs.

Aircraft Breakdown: Active 294, Reserve 70, ANG 223

#### Development Status

N/A.

#### Projected Financial Plan

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	134	2.7	115	2.3	89	1.8	187	3.7	62	1.2		
KIT'S NONREC		1.4		2.2				9.7		7.5		
EQUIPMENT	[134]	8.7	[115]	7.5	[89]	5.8	[187]	12.2	[62]	4.0		
EQUIP NONREC		1.0										
CHANGE ORDERS				2.5								4.0
DATA		0.7										
SIM/TRAINER												
SUPPORT-EQUIP		0.1										
OGC		0.0		0.1		0.1		0.1		0.1		0.1

(Continued)

Fact Sheet: C-135 MN-3149F FLIGHT DATA RECORDER & COCKPIT VOICE RECORDER UNCLASSIFIED

Projected Financial Plan Continued

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
INSTALLATION OF HARDWARE												
FY-97 109 KITS	[4]		[15]	0.5	[90]	3.6						
FY-98 25 KITS					[25]	1.0						
FY-99 115 KITS					[89]	3.6	[26]	1.0				
FY-00 89 KITS							[89]	3.6				
FY-01 187 KITS							[75]	3.0	[112]	4.5		
FY-02 62 KITS								[62]	2.5			
TOTAL INSTALL	4		15	0.5	204	8.2	190	7.6	174	7.0		
TOTAL COST (BP-1100)	134	14.7	115	15.1	89	15.9	187	33.3	62	19.9		4.2
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: C-135 MN-3149F FLIGHT DATA RECORDER & COCKPIT VOICE RECORDER

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				587
KITS NONRECUR				11.8
EQUIPMENT				20.8
EQUIP NONREC				38.2
CHANGE ORDERS				1.0
DATA				2.5
SIM/TRAINER				4.7
SUPPORT-EQUIP				0.1
OGC				0.8
INSTALLATION OF HARDWARE				
FY-97 109 KITS				[109] 4.1
FY-98 25 KITS				[25] 1.0
FY-99 115 KITS				[115] 4.6
FY-00 89 KITS				[89] 3.6
FY-01 187 KITS				[187] 7.5
FY-02 62 KITS				[62] 2.5
TOTAL INSTALL				587 23.2
TOTAL COST (BP-1100)				587 103.0

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 9 Months

Follow-On Lead Time: 6 Months

#### Milestones

Contract Date (Month/CY)	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
	09/97	09/98	01/99	11/00	11/01	11/02
Delivery Date (Month/CY)	06/98	03/99	07/99	05/01	05/02	05/03

#### Installation Schedule

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3	4 1 2	3 4 1	2 3 4	1 2 3	4 1 2
Input						
Output						

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: PACER CRAG (COMPASS, RADAR, AND GPS) MN-3150PC  
 Models of Aircraft Affected: C/KC-135  
 Center: OC-ALC - Tinker AFB Okla City, OK  
 UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT  
 Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: C-135  
 PE 0401218F Team MOBIL

# **Description/Justification**

This is a combined GATM/Nav Safety program which replaces the compass and radar. It adds a GPS receiver and TAWS integrated through a COTS/NDI flight management system which includes new multi-function displays. This is the foundation of the GATM modification. First three FY96 kits (prototype) installations funded by Kit NRE. FY96 and FY97 installs delayed due to additional requirements (ETCAS) with associated integration/testing. Although these activities forced delays, contracted annual kit buys were maintained to protect quantity buy cost breaks. Increased kit per unit cost in FY01 are due to reduced total kit buy not qualifying for quantity discount. FY98 change orders reflect software upgrade to allow GPS use as primary means of navigation and provide GPS approach capability (RAIM/GATM requirement). FY99 change orders reflect firmware change to ETCAS to meet FY2000 European requirement and GATM baseline. FY96 Sim/Trainer buy reflects Sim buy. FY97 Sim/Trainer buy reflects Tabletop Trainer buys. 24 of the fleet aircraft (RC, TC, WC, EC combination) require only a subset of Pacer CRAG hardware and will be installed by Big Safari in a configuration outside of the Pacer CRAG baseline. Thus these aircraft (and corresponding kits and installations) are not included in installation totals. Beginning Oct 99, this modification is part of Block 30 and is baselined with mods RVSM (6030), Nav/Safety (3149F), TAWS, and High Reliability Maintenance Free Battery (KC4218).

Aircraft Breakdown: Active 270, Reserve 70, ANG 223

## **Development Status** N/A

## **Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RD&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	262	24.5	81	8.2	175	14.9	41	4.7				
KITS NONRECUR	4	5.4										
EQUIPMENT	[262]	150.3	[81]	54.1	[175]	92.7	[41]	28.7				
EQUIP NONREC	[4]	6.9										
CHANGE ORDERS		34.0		25.1		7.1		0.2				
DATA		7.9		0.1		0.1		1.7				
SIM/TRAINER	[44]	28.5		0.2								
SUPPORT-EQUIP												
RETROFIT		2.2										
OGC		2.1		1.7		2.5		2.0				
INSTALLATION OF HARDWARE												
FY-95	[6]	1.4										
FY-96	[44]	17.5										
FY-97	[30]	9.3	[71]	15.4								
FY-98			[102]	22.1	[13]	3.0						
FY-99					[81]	18.8						
FY-00					[61]	14.1	[114]	24.2				
FY-01							[41]	8.7				
TOTAL INSTALL	80	28.1	173	37.5	155	35.9	155	32.9				
TOTAL COST (BP-1100)	266	290.0	81	126.9	175	153.2	41	70.1				

(Totals may not add due to rounding)

UNCLASSIFIED

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS							559	52.3
KIT'S NONRECUR							4	5.4
EQUIPMENT							[559]	325.8
EQUIP NONREC							[4]	6.9
CHANGE ORDERS								66.4
DATA								9.8
SIM/TRAINER							[44]	28.7
SUPPORT-EQUIP								
RETROFIT								2.2
OGC								8.2
INSTALLATION OF HARDWARE								
FY-95							[6]	1.4
FY-96							[44]	17.5
FY-97							[101]	24.7
FY-98							[115]	25.1
FY-99							[81]	18.8
FY-00							[175]	38.3
FY-01							[41]	8.7
TOTAL INSTALL							563	134.4
TOTAL COST (BP-1100)							563	640.2

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	12/95	03/97	09/97	12/97	01/99	10/99	10/00	
Delivery Date (Month/CY)	06/96	09/97	06/98	06/98	10/99	04/00	04/01	

**Installation Schedule**

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input		3		1	2	15	18	25
Output					1	3	1	4



UNCLASSIFIED

UNCLASSIFIED

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	QTY
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				588
KITS NONREC				4.0
EQUIPMENT				1.8
EQUIP NONREC				[588]
CHANGE ORDERS				17.1
DATA				
SIM/TRAINER				1.9
SUPPORT-EQUIP				0.9
INSTALL				[20]
OGC				0.4
INSTALLATION OF HARDWARE				
FY-95 130 KITS				[130]
FY-96 216 KITS				[216]
FY-97 206 KITS				[206]
FY-99 36 KITS				[36]
TOTAL INSTALL				588
TOTAL COST (BP-1100)				2.9
TOTAL COST				588
(Totals may not add due to rounding)				29.1

Method of Implementation: COMBINATION

Initial Lead Time: 12 Months  
Follow-On Lead Time: 12 Months

**Milestones**

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	09/95	06/96	12/96				
Delivery Date (Month/CY)	06/96	06/97	12/97				

**Installation Schedule**

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input							
Output							

02/15/2000

FY 2001 PBR

Modification Title and No: INTERPHONE REPLACEMENT MN-4310

Models of Aircraft Affected: KC-135 Fleet

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-135 Class P

PE 0401218F Team MOBIL

# Description/Justification

This is a GATM communication modification which replaces existing Interphone system with a New State-of-the-Art Interphone system which provides improved communication between all crew positions through a highly reliable and maintainable integrated system that also supports future growth for Global Air Traffic Management (GATM) requirements. Phase I Interphone boxes Phase II additional wiring, new junction box, new speaker system. Phase II funded by GATM and is baselined with GATM (mod 9709) for installation purposes.

FY98, 4 each kits, purchased with 0350 money.

FY98, NRE, for RT&E models.

FY98, OGC, approx 1M to GATM support.

FY99 & FY00 Installs funded with 0350 money.

FY99 & FY00 NRE, AIC-18 unique integration special purpose aircraft, various MDSs. 543 aircraft have AIC-10 and 45 aircraft have AIC-18.

FY01 Data, 950K, Final Incorporation.

Aircraft Breakdown: Active 294, Reserve 70, ANG 224

# Development Status

N/A

# Projected Financial Plan

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	4		338	2.5	201	1.6	45	0.4				
KITS NONRECUR		2.0		0.2				0.4				
EQUIPMENT	[4]		[338]	13.4	[201]	8.4	[45]	1.9				
EQUIP NONREC												
CHANGE ORDERS												
DATA				1.2		0.6		0.7				
SIM/TRAINER	[11]	0.1	[12]	0.3								
SUPPORT-EQUIP												
OGC		1.1		0.1		1.0		0.1				
INSTALLATION OF HARDWARE												
FY-98 4 KITS	[4]	0.0			[266]		[21]	0.0				
FY-99 338 KITS			[51]				[201]	1.0				
FY-00 201 KITS							[45]	0.2				
FY-01 45 KITS												
TOTAL INSTALL	4	0.0	51		266		267	1.3				
TOTAL COST (BP-1100)	4	3.2	338	17.9	201	11.6	45	4.8				

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-135 MN-4310 INTERPHONE REPLACEMENT  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					588	4.5		
KITS NONRECUR						2.7		
EQUIPMENT					[588]	23.7		
EQUIP NONREC								
CHANGE ORDERS						2.5		
DATA						0.4		
SIM/TRAINER					[23]			
SUPPORT-EQUIP						2.3		
OGC								
INSTALLATION OF HARDWARE								
FY-98 4 KITS					[4]	0.0		
FY-99 338 KITS					[338]	0.0		
FY-00 201 KITS					[201]	1.0		
FY-01 45 KITS					[45]	0.2		
TOTAL INSTALL					588	1.3		
TOTAL COST (BP-1100)					588	37.5		

(Totals may not add due to rounding)

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 4 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-97	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	05/98	11/98	10/99		
Delivery Date (Month/CY)	09/98	05/99	04/00		

**Installation Schedule**

	FY-97	FY-98	FY-99	FY-00	FY-01
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input			3 48 41 75	75 75 75 75	78 78 78 78
Output			4 4 4	44 44 44 44	79 79 79 79

02/15/2000

FY 2001 PBR

Modification Title and No: REDUCED VERTICAL SEPARATION MINIMA MN-6030

Models of Aircraft Affected: C/KC-135

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-135

PE 0401218F Team MOBIL

**Description/Justification**

This GATM Navigation modification installs precision altitude measuring equipment to allow KC-135 aircraft to operate in premium reduced vertical separation ICAO airspace. FY97 NRE is for KC-135R models and FY98 NRE is for KC-135E. This modification is part of Block 30 and is baselined with mod Pacer Crag (3150PC), Nav/Safety (3149) and TAWS.

Aircraft Breakdown: Active 273, Reserve 70, ANG 224

**Development Status**

N/A

**Projected Financial Plan**

RDT&E (3600)

**PROCUREMENT (3010)**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
INSTALL KITS	7	1.2	127	3.0	204	4.2	202	4.0	27	1.3		
KITS NONREC		3.7		6.2		6.5						
EQUIPMENT	[7]	1.1	[127]	14.1	[204]	23.0	[202]	22.7	[27]	4.7		
EQUIP NONREC		0.2										
CHANGE ORDERS		0.5		0.5		0.8		0.1				
DATA		0.8		0.2						0.2		
SIM/TRAINER			[6]	3.3	[9]	0.9	[5]	0.4		0.0		
SUPPORT-EQUIP				0.2		0.1		0.1		0.5		
WARRANTY				0.3		1.2		0.6		0.3		
OGC		2.6		0.5		0.3		0.3				

**INSTALLATION OF HARDWARE**

FY-97	1 KITS	[1]										
FY-98	6 KITS	[6]										
FY-99	127 KITS	[20]	1.1		[107]	5.5						
FY-00	204 KITS				[97]	5.0	[107]	5.3				
FY-01	202 KITS						[84]	4.2	[118]	7.7		
FY-02	27 KITS								[27]	1.8		
TOTAL INSTALL		7	20	1.1	204	10.5	191	9.5	145	9.4		

TOTAL COST (BP-1100)	7	10.2	127	29.3	204	47.4	202	37.6	27	16.4		
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(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-135 MN-6030 REDUCED VERTICAL SEPARATION MINIMA  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					567			13.6
KITS NONRECUR								16.4
EQUIPMENT					[567]			65.6
EQUIP NONREC								0.2
CHANGE ORDERS								1.9
DATA								1.2
SIM/TRAINER					[20]			4.6
SUPPORT-EQUIP								0.4
WARRANTY								2.5
OGC								3.9
INSTALLATION OF HARDWARE								
FY-97 1 KITS							[1]	
FY-98 6 KITS							[6]	
FY-99 127 KITS							[127]	6.6
FY-00 204 KITS							[204]	10.3
FY-01 202 KITS							[202]	11.9
FY-02 27 KITS							[27]	1.8
TOTAL INSTALL					567			30.6
TOTAL COST (BP-1100)					567			140.8

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-97	FY-98	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	12/97	06/98	06/98	03/99	11/99	12/00	12/01
Delivery Date (Month/CY)	06/98	12/98	12/98	09/99	05/00	06/01	06/02

**Installation Schedule**

	FY-97	FY-97	FY-98	FY-98	FY-99	FY-99	FY-00	FY-01	FY-02
Quarters	1	2	3	4	1	2	3	4	1
Input				1			20	48	52
Output					6		20	48	52

02/15/2000

FY 2001 PBR

Modification Title and No: 8.33 KHZ VHF RADIO MN-9702

Models of Aircraft Affected: C/KC-135

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-135

Center: ASC - Wright Patterson AFB, OH

PE 0401218F Team MOBIL

**Description/Justification**

This is a GATM communication modification. Increasing use will be made of VHF data links with data eventually being used more than voice. 8.33kHz DSB-AM voice operation provides an early relief for those areas experiencing a shortage of assignable voice channels at present. Prerequisite to mod GATM (9709).

Aircraft Breakdown: Active 271, Reserve 70, ANG 224

**Development Status**

N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RD&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS			92	2.1	126	2.4	347	7.1				
KITS NONRECUR												
EQUIPMENT			[92]	9.5	[126]	12.1	[347]	36.2				
EQUIP NONREC												
CHANGE ORDERS				0.3		0.6		6.0				
DATA				0.3		0.8		0.2				
SIM/TRAINER												
SUPPORT-EQUIP				0.1		0.5		1.4				
WARRANTY				0.1								
TRAINING												
OGC				0.3		0.4		0.4				
TOTAL COST (BP-1100)	92	12.8	126	16.6	347	51.3						

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-135 MN-9702 8.33 KHZ VHF RADIO

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					565	11.6		
KITS NONRECUR								
EQUIPMENT					[565]	57.8		
EQUIP NONREC								
CHANGE ORDERS						6.9		
DATA						1.3		
SIM/TRAINER								
SUPPORT-EQUIP						2.0		
WARRANTY						0.1		
TRAINING						1.1		
OGC								
TOTAL COST (BP-1100)					565	80.7		

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 1 Month

Follow-On Lead Time: 1 Month

Milestones

	FY-99	FY-00	FY-01
Contract Date (Month/CY)	07/99	01/00	12/00
Delivery Date (Month/CY)	09/99	03/00	02/01





	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS	85	13.8	20	3.2	114	17.9	587	102.2
KITS NONRECUR								
EQUIPMENT	[85]	73.7	[20]	16.4	[114]	99.4	[587]	31.0
EQUIP NONREC								
CHANGE ORDERS		2.4				7.0		31.9
DATA		1.6		1.0		7.0		19.7
SIM/TRAINER	[3]	2.9			[4]	4.0	[20]	32.5
SUPPORT-EQUIP		0.3						2.1
MILSTRIP		3.4		1.1		6.5		23.7
MOD Prep		1.9		0.3				12.3
WARRANTY		0.5		1.1		3.0		7.4
OGC		1.0		0.7		3.0		15.6
INSTALLATION OF HARDWARE								
FY-99							[3]	2.2
3 KITS							[50]	17.5
FY-01							[190]	61.9
50 KITS							[125]	43.5
FY-02							[85]	31.9
190 KITS							[20]	8.1
FY-03							[114]	47.2
125 KITS								212.2
FY-04								
85 KITS								
FY-05								
20 KITS								
FY-06								
114 KITS								
TOTAL INSTALL	125	43.5	85	31.9	134	55.3	587	212.2
TOTAL COST (BP-1100)	85	144.9	20	55.6	114	203.1	587	981.7
(Totals may not add due to rounding)								

Method of Implementation: CONTRACT FIELD TEAM  
 Initial Lead Time: 12 Months Follow-On Lead Time: 9 Months

**Milestones**

Contract Date (Month/CY)	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07	FY-08
06/99	06/99	12/99	12/00	12/01	12/02	12/03	12/04	12/05		
Delivery Date (Month/CY)	06/00	09/00	09/01	09/02	09/03	09/04	09/05	09/06		

**Installation Schedule**

	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07	FY-08	FY-09
Quarters	1	2	3	4	1	2	3	4	1	2	3
Input											
Output											

UNCLASSIFIED

(Continued)

Fact Sheet: C-135 MN-9709 GLOBAL AIR TRAFFIC MANAGEMENT (GATM)

Installation Schedule Continued

	FY-07				FY-08			
	1	2	3	4	1	2	3	4
Quarters	1	2	3	4	1	2	3	4
Input	5	5	5	29	29	29	27	
Output	9	7	3	15	30	30	10	

02/15/2000

FY 2001 PBR

Modification Title and No: TURBINE ENGINE MONITORING SYSTEM (TEMS) REPLACEMENT MN-9734

Models of Aircraft Affected:

Center: OC-ALC - Tinker AFB Okla City, OK

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-135 Class P

PE 0401218F Team MOBIL

**Description/Justification**

The DoD has begun an effort to reduce the total ownership cost (RTOC) for weapon systems, while improving their performance. The approach taken is to fund promising candidate system that produce significant near term Operations and Support (O&S) savings. The KC-135 Turbine Engine Monitoring System (TEMS) provides continuous in-flight monitoring and recording of selected aircraft and engine parameters required to evaluate engine performance trending, limited engine event detection, parts life tracking and mission profile data. Data are downloaded on the ground and are used to anticipate engine and associated component overhaul before an in-flight catastrophic engine failure occurs.

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

**Development Status**

N/A

**Projected Financial Plan**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)						
PROCUREMENT (3010)						
INSTALL KITS						
KITS NONRECUR						
EQUIPMENT						
EQUIP NONREC						
CHANGE ORDERS						
DATA						
SIM/TRAINER						
SUPPORT-EQUIP						
ENG SUPPORT						
TOTAL COST (BP-1100)				1.3	1.3	1.3

(Totals may not add due to rounding)

Fact Sheet: C-135 MN-9734 TURBINE ENGINE MONITORING SYSTEM (TEMS) REPLACEMENT

(Continued)

(Continued)

FY-04		FY-05		TO COMP		TOTAL	
QTY	COST	QTY	COST	QTY	COST	QTY	COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

ENG SUPPORT

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

Milestones

FY-01

Contract Date (Month/CY)

Delivery Date (Month/CY)

Installation Schedule

FY-01

Quarters	1	2	3	4
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Input

Output

UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: C-135 MN-99999X LOW COST MODIFICATIONS

(Continued)

FY-04		FY-05		TO COMP		TOTAL	
QTY	COST	QTY	COST	QTY	COST	QTY	COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

AIRCRAFT

CASEY 01

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

Milestones

FY-93

Contract Date (Month/CY)

Delivery Date (Month/CY)

**Models of Aircraft Affected:**

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-135 Class P

PE 0401218F Team MOBIL

**Description/Justification**

**RESTRICTION/RESTRICTION**  
This modification provides protection from interference with FM broadcast band adjacent to the aeronautical radio navigation band. This modification effort will reduce/eliminate the number of non-compliant aircraft and reduce the increased operational risk and operational restrictions placed on non-compliant aircraft by host nations.

**Aircraft Breakdown:** Active 15, Reserve 0, ANG 0

### Development Status

## Projected Financial Plan

RDT&amp;E (3600)

**PROCUREMENT (3010)**

## INSTALL KITS

## INSTRUMENTAL KITS NONRECUR

## MISNOIRED EQUIPMENT

EQUIPMENT  
EQUIP NONRECEQUIF NONKEC  
CHANGE ORDERSCHANG  
DATADAIA  
SIM/TRAINEESIM/IRAINER  
SUPPORT-FOUR

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

PRIOR	FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST

15 7.0

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15 7.0



(Continued)

UNCLASSIFIED

Fact Sheet: C-135 MN-DC101 FM IMMUNITY  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR							15	7.0
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
TOTAL COST (BP-1100)							15	7.0

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-00	FY-01
Contract Date (Month/CY)	02/00	02/01
Delivery Date (Month/CY)	08/00	08/01

02/15/2000

FY 2001 PBR

Modification Title and No: HIGH RELIABILITY MAINT FREE BATTERY MN-KC4218

Models of Aircraft Affected: KC-135

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: C-135

Center: OC-ALC - Tinker AFB Okla City, OK

PE 0401218F Team MOBIL

**Description/Justification**

The high reliability maintenance free battery program reduces maintenance and increases reliability by installing two sealed lead acid batteries in the place of the four existing vented nicad batteries. Note: Concurrent installation with Pacer Crag in FY98 saves \$814K. In FY96 and FY97, the contract date is 4th Qtr 97 because of the link to the Pacer CRAG production decision in Sep 97. Follow-on lead times vary because the KC-135 battery delivery is only a small part of an overall battery program and KC-135 program does not control delivery schedule. This program is baselined with Pacer CRAG (mod 3150PC), TAWS and RVSM (mod 6030).

Aircraft Breakdown: Active 294, Reserve 70, ANG 224

**Development Status**

N/A

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

OGC

**INSTALLATION OF HARDWARE**

FY-95 54 KITS

FY-96 62 KITS

FY-97 135 KITS

FY-98 180 KITS

FY-99 157 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	QTY	QTY	QTY	QTY	QTY
	COST	COST	COST	COST	COST	COST
431	2.7	157	0.7			
[431]	0.3	[157]	0.2			
	2.6					
	0.1					
	0.3					
	0.7					0.8
[23]	0.4					
	0.2	0.0	0.0	0.0	0.0	0.0
[54]	0.6					
[8]	0.1	[54]	0.3			
		[126]	0.7			
			[9]	0.1		
			[153]	1.0	[27]	0.2
			[18]	0.1	[139]	1.0
62	0.6	180	1.1	180	1.2	1.2
431	8.0	157	1.9	1.3	1.3	0.8

UNCLASSIFIED

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			588	3.3
KITS NONRECUR				0.3
EQUIPMENT			[588]	2.8
EQUIP NONREC				0.1
CHANGE ORDERS				0.3
DATA				1.5
SIM/TRAINER			[23]	0.4
SUPPORT-EQUIP				
OGC				0.3
INSTALLATION OF HARDWARE				
FY-95 54 KITS			[54]	0.6
FY-96 62 KITS			[62]	0.4
FY-97 135 KITS			[135]	0.8
FY-98 180 KITS			[180]	1.2
FY-99 157 KITS			[157]	1.2
TOTAL INSTALL			588	4.2
TOTAL COST (BP-1100)			588	13.3

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	09/95	09/97	09/97	03/98	03/99			
Delivery Date (Month/CY)	09/96	09/98	09/98	03/99	03/00			

**Installation Schedule**

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input			2 2	15 18 25 45	15 18 25 45	15 18 25 45	15 18 25 45	15 18 25 45
Output			2 2	15 18 25 45	15 18 25 45	15 18 25 45	15 18 25 45	15 18 25 45

02/15/2000

FY 2001 PBR

Modification Title and No: MULTIPPOINT REFUELING MN-KC4231

Models of Aircraft Affected: KC-135R

## UNCLASSIFIED

## MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-135 Class P

Center: ASC - Wright Patterson AFB, OH

PE 0401218F Team MOBIL

**Description/Justification**

Install drogue/hose reels on aircraft to provide multipoint refueling capability to support U.S. Navy, Marine and Allies equipped with probe refueling equipment. The refueling pod equipment (33 sets) does not equal aircraft install kits (45 acft) to allow a minimum of 33 aircraft available to carry pods during programmed depot maintenance action. Each set of equipment kits equals two (2) pods. FY95 prototype install funded with 3600 funds. Procurement exceeded install due to quantity discount price break option (Foreign Military Sales customers). Program restructured due to fiscal constraints: no kit buys in FY99 and FY00 due to schedule extension into FY08.

Aircraft Breakdown: Active 41, Reserve 2, ANG 2

**Development Status**

Completed.

**Projected Financial Plan**

	PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)	[1]	33.5										
PROCUREMENT (3010)												
INSTALL KITS	19	15.5					4	4.7	2	2.4	1	1.3
KITS NONRECUR EQUIPMENT	[19]	33.6					[3]	7.8	[1]	2.7		
EQUIP NONREC								0.3				
CHANGE ORDERS		1.0						0.3		0.3		
DATA		1.3						0.2		0.2		
SIM/TRAINER		4.6								0.6		
SUPPORT-EQUIP		0.7		2.3		0.2		2.0				
ICS		0.4						0.2		0.4		0.1
WARRANTY		0.3				0.3		0.4		0.4		0.1
OGC												
INSTALLATION OF HARDWARE												
FY-96	[2]	3.4		0.6								
FY-97	[5]	6.0		3.2		[1]	0.6					
FY-98						[5]	3.2					
FY-01									[4]	3.7	[2]	1.9
FY-02												
FY-03												
FY-04												
FY-05												
FY-06												
FY-07												
TOTAL INSTALL	7	9.4	6	3.8	6	3.8			4	3.7	2	1.9
TOTAL COST (BP-1100)	19	66.7		6.4		4.2		16.1	2	10.7	1	3.5

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: C-135 MN-KC4231 MULTIPPOINT REFUELING  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)							[1]	33.5
PROCUREMENT (3010)								
INSTALL KITS	2	2.7	1	1.4	15	22.0	44	50.0
KITS NONRECUR								0.2
EQUIPMENT					[9]	28.3	[32]	72.3
EQUIP NONREC						4.0		4.3
CHANGE ORDERS						0.6		2.3
DATA						1.0		2.6
SIM/TRAINER								
SUPPORT-EQUIP						2.0		7.2
ICS		0.3		0.3		1.3		5.1
WARRANTY		0.1		0.2		1.2		3.0
OGC								3.3
INSTALLATION OF HARDWARE								
FY-96							[3]	4.0
FY-97							[11]	9.9
FY-98							[5]	3.2
FY-01							[4]	3.7
FY-02							[2]	1.9
FY-03		1.0					[1]	1.0
FY-04	[1]		[2]	2.0			[2]	2.0
FY-05					[1]	1.0	[1]	1.0
FY-06					[7]	7.6	[7]	7.6
FY-07					[8]	8.9	[8]	8.9
TOTAL INSTALL	1	1.0	2	2.0	16	17.5	44	43.3
TOTAL COST (BP-1100)	2	4.2	1	4.0	15	77.8	44	193.5

(Totals may not add due to rounding)

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 11 Months

Follow-On Lead Time: 11 Months

**Milestones**

	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07	FY-08
Contract Date (Month/CY)			06/96	10/96	01/98			01/01	01/02	01/03	01/04	01/05	01/06	01/07	
Delivery Date (Month/CY)			05/97	09/97	12/98			12/01	12/02	12/03	12/04	12/05	12/06	12/07	
Contract Date (Month/CY)															
Delivery Date (Month/CY)															

## **Installation Schedule**

(Continued)

[illegible]

02/15/2000

FY 2001 PBR

Modification Title and No: SIMULATOR UPGRADE MN-SIM135

Models of Aircraft Affected: C-135 SIMULATORS

## UNCLASSIFIED

## MODIFICATION OF AIRCRAFT

Center: OO-ALC - Hill AFB, UT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-135

PE 0401897F Team MOBIL

Description/Justification

KC-135 Simulator upgrade program will add a new, state-of-the-art visual systems, motion base and Distributive Mission Training (DMT). These upgrade efforts will allow AMC to move flying proficiency training from the more expensive aircraft to the simulator. Upgrade program kits consists of VUE kits, Motion kits, DCL kits & retrofit kits making FY kit procurement unique. Installed in phases. These mods complete in FY 01. DMT is programmed to begin in FY02. This program supports AMC C-MNS 001-93, MNS AMC 021-93, and ORD AMC 021-93 I/II/III.

Aircraft Breakdown: Active 15, Reserve 3, ANG 2

Development Status

N/A

Projected Financial Plan

RDT&amp;E (3600)

## PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

OGC

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

PRIORITY	FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
11	2.4	2.4	16	16.3	18	10.6	15	6.6	20	6.9
2	3.6	3.6					2	2.5		
	2.4	2.4		3.9		3.0		1.7		2.0
	1.7	1.7		1.7		1.1		0.9		1.0
	0.0	0.0		0.0		0.0		0.0		0.0
13	10.2	10.2	16	21.9	18	14.8	17	11.7	20	9.8

(Continued)

UNCLASSIFIED

Fact Sheet: C-135 MN-SIM135 SIMULATOR UPGRADE

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			80	42.8
KITS NONRECUR			4	6.2
EQUIPMENT				13.0
EQUIP NONREC				
CHANGE ORDERS				
DATA				6.4
SIM/TRAINER				
SUPPORT-EQUIP				
OGC				0.1
TOTAL COST (BP-1100)			84	68.5

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)				03/99	12/99	12/00	12/01	12/02	
Delivery Date (Month/CY)				03/00	12/00	12/01	12/02	12/03	



02/15/2000

FY 2001 PBR

Modification Title and No: TERRAIN AWARENESS & WARNING SYS (TAWS) MN-TAWS

Models of Aircraft Affected: C/KC-135

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: C-135

PE 0401218F Team MOBIL

# Description/Justification

The terrain awareness and warning system is a congressionally-mandated system that alerts aircrews to flight profiles that project an impact with the ground. It implements the Enhanced Ground Proximity Warning System and uses data from existing aircraft sensors to project the aircraft flight path forward in time and avoid controlled flight into terrain incidents. This mod is part of Block 30 and is baselined with Pacer CRAG (3150PC), Nav/Safety (3149), and RVSM (6030).

Aircraft Breakdown: Active 270, Reserve 70, ANG 223

## Development Status

N/A

## Projected Financial Plan

RDT&E (3600)

### PROCUREMENT (3010)

INSTALL KITS

KITS NONREC

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

OGC

TRAINING

### INSTALLATION OF HARDWARE

FY-96 15 KITS

FY-97 226 KITS

FY-98 25 KITS

FY-99 81 KITS

FY-00 175 KITS

FY-01 41 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
262	8.6	81	2.6	175	5.7	41	1.6					
4	9.9											
[262]	12.6	[81]	4.2	[175]	9.4	[41]	2.3					
[4]	0.3											
			0.7		0.8							
	7.9		0.3									
[19]	3.2	[1]	0.2									
	0.5		0.8	0.5	0.2							
	0.4											
[9]	0.4	[6]	0.1									
		[10]	0.1	[204]	7.0	[12]	0.5					
						[25]	0.9					
						[81]	2.1					
						[72]	1.8					
								[103]	5.8			
								[41]	2.9			
9	0.4	16	0.2	204	7.0	190	5.3	144	8.8			
266	43.7	81	8.9	175	23.4	41	9.4					

## UNCLASSIFIED

(Continued)

Fact Sheet: C-135 MN-TAWS TERRAIN AWARENESS &amp; WARNING SYS (TAWS)

(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			559	18.4
KITS NONRECUR			4	9.9
EQUIPMENT			[559]	28.5
EQUIP NONREC			[4]	0.3
CHANGE ORDERS				1.5
DATA				8.2
SIM/TRAINER			[20]	3.4
SUPPORT-EQUIP				2.0
OGC				0.4
TRAINING				
INSTALLATION OF HARDWARE				
FY-96 15 KITS			[15]	0.6
FY-97 226 KITS			[226]	7.7
FY-98 25 KITS			[25]	0.9
FY-99 81 KITS			[81]	2.1
FY-00 175 KITS			[175]	7.6
FY-01 41 KITS			[41]	2.9
TOTAL INSTALL			563	21.8
TOTAL COST (BP-1100)			563	94.3

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 8 Months

Follow-On Lead Time: 6 Months

**Milestones**

Contract Date (Month/CY)

Delivery Date (Month/CY)

	FY-92	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1	2	3	4	1	2	3	4	1	2	3
Input											
Output											
FY-92											
FY-93											
FY-94											
FY-95											
FY-96											
FY-97											
FY-98											
FY-99											
FY-00											
FY-01											
FY-02											

**Installation Schedule**

Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Input																
Output																
FY-92																
FY-93																
FY-94																
FY-95																
FY-96																
FY-97																
FY-98																
FY-99																
FY-00																
FY-01																
FY-02																

## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)					DATE February 2000		
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: E-3				
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005
	\$112.774	\$104.254	\$88.654	\$70.361	\$59.181	\$94.849	\$105.826

This line item funds modifications to the E-3 aircraft. The four engine E-3 is a modified Boeing 707 airframe which carries airborne radar and provides all-altitude air surveillance, threat warning, and control of theater air forces. The primary modification budgeted in FY01 is the Radar System Improvement program. The specific modifications budgeted and programmed are below.

MOD CLASS P	NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
3150		NAVSTAR GLOBAL POS	2.7	4.9	2.4						66.3
3371		ELECTRONIC SUPPOR	17.8	21.6	3.9						347.2
3402		DATA ANALYSIS PROG	1.3	0.3	0.1						105.0
50001A		EXT SEN, COMPUTERS	28.0								110.0
50001C		EXTEND SENTRY, COM	0.2	0.1							29.4
50001P		PDMA	1.5	2.8	1.5	1.0	0.2				12.4
50001R		EXTEND SENTRY, RAD	1.8								47.0
50001T		BLOCK 40/45 UPGADE						75.7	98.0		173.7
70001C		INTEGRATED BROADC	0.5	1.2	1.2	1.8	1.6				18.8
7266		RADAR SYSTEM IMPRO	58.9	63.6	77.6	58.1	49.3	6.7	2.8		474.8
DC101		FM IMMUNITY		3.5	0.7						4.3
T8135		SATCOM DAMA			1.3	9.5	8.1	12.4	5.1		36.3
Z88888		REPROGRAMMINGS	0.1	6.3							6.4
TOTAL FOR CLASS P			112.8	104.3	88.7	70.4	59.2	94.8	105.8	0.0	1,431.7
TOTAL FOR AIRCRAFT E-3			112.8	104.3	88.7	70.4	59.2	94.8	105.8	0.0	1,431.7

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 57	PAGE NO. 1
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02/15/2000

FY 2001 PBR

Modification Title and No: NAVSTAR GLOBAL POSITIONING SYSTEM MN-3150

Models of Aircraft Affected: E-3

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P

Center: ESC - Hanscom AFB, MA

PE 0207417F Team INFO

**Description/Justification**

Navstar Global Positioning System (GPS) provides worldwide three-dimensional positioning/navigation for military aircraft. This effort is part of the E-3 Block 30/35 modification. In FY95, ECP 1204R2 was added to the contract to modify GPS with the Inertial Navigation System (GPS +INS=GINS). In FY96, GINS equipment kits were purchased to retrofit the GPS kits(funding in the Group B equipment line.) (This explains why the Group B funding is much higher in FY96 for the same quantity as in FY97.) Therefore, aircraft installs in FY96 and on will include the new GINS kits. Various enhancements in FY01 provide compliance to mandated GPS requirements. The install kit (Group A kits) and installation costs are shown in the ESM mod. MN 3371. (33 Aircraft--32 Operational and 1 Test Aircraft). TS-3 was retrofitted with 3600 dollars shown on MN 3371 bringing the total to 33 A/C. This modification is baselined with MN 3371.

Aircraft Breakdown: Active 33, Reserve 0, ANG 0

**Development Status**

Satellites and control segments are currently in production/deployment. 3600 funding for this program is part of the total block 30/35 effort and is depicted on ESM, Mod 3371.

**Projected Financial Plan**

	PRIOR QTY	FY-99		FY-00		FY-01		FY-02		FY-03	
		COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY
RDT&E (3600)											
PROCUREMENT (3010)											
INSTALL KITS											
KITS NONRECUR		8.5									
EQUIPMENT	32	45.8									
EQUIP NONREC				0.0							
CHANGE ORDERS											
DATA		1.0		1.9		1.1					
SIM/TRAINER											
SUPPORT-EQUIP											
TRAINING											
GFE		0.8									
SOFTWARE NONREC				0.4		2.0		0.8			
CONTRACTOR SUPPORT				0.1		0.6		0.8			
PROGRAM MNGMT		0.0		0.0		0.2		0.2			
OGC						0.1		0.1			
ICS		0.3		0.3		0.7		0.5			
INSTALLATION OF HARDWARE											
FY-93 3 KITS	[3]										
FY-95 9 KITS	[9]										
FY-96 10 KITS	[6]										
FY-97 10 KITS	[4]										
	[1]										
TOTAL INSTALL	18		5		[8]		1				
TOTAL COST (BP-1100)	32	56.3		2.7		4.9		2.4			

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: E-3 MN-3150 NAVSTAR GLOBAL POSITIONING SYSTEM  
(Continued)

FY-04	FY-05	TO COMP	TOTAL
QTY	COST	QTY	COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS			
KITS NONRECUR			8.5
EQUIPMENT	32		45.8
EQUIP NONREC			0.0
CHANGE ORDERS			
DATA			3.9
SIM/TRAINER			
SUPPORT-EQUIP			
TRAINING			
GFE			0.8
SOFTWARE NONREC			3.3
CONTRACTOR SUPPORT			1.5
PROGRAM MNGMT			0.5
OGC			0.2
ICS			1.8

INSTALLATION OF HARDWARE

FY-93	3 KITS	[3]
FY-95	9 KITS	[9]
FY-96	10 KITS	[10]
FY-97	10 KITS	[10]
TOTAL INSTALL	32	
TOTAL COST (BP-1100)	32	66.3

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 27 Months

Follow-On Lead Time: 24 Months

Milestones

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	12/93	03/94	03/95	12/95	12/96				
Delivery Date (Month/CY)	03/96	03/97	12/97	12/97	12/98				

Installation Schedule

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input								
Output								

Installation Schedule Continued

			<u>FY-01</u>	
Quarters	1	2	3	4
Input	1			
Output	2	1		

UNCLASSIFIED

(Continued)

02/15/2000

FY 2001 PBR

Modification Title and No: ELECTRONIC SUPPORT MEASURES (ESM) MN-3371

Models of Aircraft Affected: E-3B/C

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ESC - Hanscom AFB, MA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: E-3

PE 0207417F Team INFO

# **Description/Justification**

The Electronic Support Measures (ESM) system will allow the E-3 to passively detect, locate, and identify airborne, shipborne, and ground based emitters. ESM will also provide threat warning capability. Data from the ESM system will be presented at existing E-3 situation display console displays. ESM is part of the E-3 block 30/35 modification. The development contract includes the kit productions option IAW the ESM US/NATO memorandum of understanding, dated 17 Nov 86. 3600 funds were used to procure two install kits. This explains why the Total Funded and Total Install lines only show 31 aircraft for production. Final Tech Orders prep and print are also included in FY01. The schedule for installs was accelerated in May 1999 to retrofit (8) A/C in FY00 and (1) A/C in FY01. This explains the increase in install funds in FY00 and the decrease in FY01. (33 Aircraft -- 32 Operational aircraft and 1 test aircraft.) Install kits include funds for all Block 30/35 Mod Group A kits. These are combined in the contract as one kit and reflected on this P-3. All installation of hardware costs for all Block 30/35 mods are shown on this modification. The \$1.1M for 'Sim/Trainer' in FY93 was for training. This modification is baselined with MN 3150 and MN 3402.

Aircraft Breakdown: Active 33, Reserve 0, ANG 0

## **Development Status**

Complete. IOT&E: FY91, DT&E: FY92

## **Projected Financial Plan**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		90.0				
PROCUREMENT (3010)						
INSTALL KITS	[31]	77.0				
KITS NONRECUR			0.1			
EQUIPMENT	31	121.6				
EQUIP NONREC		8.6				
CHANGE ORDERS						
DATA		3.2	0.0	0.9		
SIM/TRAINER	[5]	6.8				
SUPPORT-EQUIP		29.5				
ICS		3.8	0.3			
REFURB		1.3	0.0			
OGC		7.2	0.1	0.1		
WARRANTY		4.0				
GFE		5.0	1.1	0.1		
DMS (Diminished Manufacturing Sources)			0.3			
CONTRACT SUPPORT			0.5	0.1		
PROGRAM MNGMT		0.6	1.1	0.3		

(Continued)

UNCLASSIFIED

Fact Sheet: E-3 MN-3371 ELECTRONIC SUPPORT MEASURES (ESM)

Projected Financial Plan Continued

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
INSTALLATION OF HARDWARE												
FY-93	3	5.7										
FY-95	9	14.8										
FY-96	9	14.9	[3]	10.3								
FY-97	10		[1]	3.4	[8]	18.1	[1]	2.6				
TOTAL INSTALL	18	35.4	4	13.7	8	18.1	1	2.6				
TOTAL COST (BP-1100)	31	303.8		17.8		21.6		3.9				

(Totals may not add due to rounding)



(Continued)

UNCLASSIFIED

Fact Sheet: E-3 MN-3371 ELECTRONIC SUPPORT MEASURES (ESM)  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				90.0
PROCUREMENT (3010)				
INSTALL KITS	[31]			77.0
KITS NONRECUR				0.1
EQUIPMENT	31			123.5
EQUIP NONREC				8.6
CHANGE ORDERS				
DATA				4.1
SIM/TRAINER	[5]			6.8
SUPPORT-EQUIP				29.5
ICS				4.4
REFURB				1.3
OGC				8.4
WARRANTY				4.0
GFE				6.4
DMS (Diminished				0.7
Manufacturing Sources)				
CONTRACT SUPPORT				0.6
PROGRAM MNGMT				2.0
INSTALLATION OF HARDWARE				
FY-93 3 KITS	[3]			5.7
FY-95 9 KITS	[9]			14.8
FY-96 9 KITS	[9]			25.2
FY-97 10 KITS	[10]			24.1
TOTAL INSTALL	31			69.8
TOTAL COST (BP-1100)	31			347.2

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 27 Months

Follow-On Lead Time: 24 Months

Milestones

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	12/93	03/95	12/95	12/96	12/96				
Delivery Date (Month/CY)	03/96	03/97	12/97	12/98					

Installation Schedule

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input								
Output								

(Continued)

## UNCLASSIFIED

Quarters	1	2	3	4
Input	1			
Output	2	1		

UNCLASSIFIED

PE 0207417F Team INFO

## (Totals may not add due to rounding)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR	31	78.3		
EQUIPMENT		1.3		
EQUIP NONREC				
CHANGE ORDERS				
DATA		0.1		
SIM/TRAINER	[5]	9.1		
SUPPORT-EQUIP		2.5		
OGC		0.0		
ICS		0.1		
PROGRAM MNGMT		0.0		
GFE		13.6		
INSTALLATION OF HARDWARE				
FY-93 3 KITS	[3]			
FY-95 9 KITS	[9]			
FY-96 9 KITS	[9]			
FY-97 10 KITS	[10]			
TOTAL INSTALL	31			
TOTAL COST (BP-1100)	31	105.0		
(Totals may not add due to rounding)				

Method of Implementation: DEPOT

Initial Lead Time: 27 Months

Follow-On Lead Time: 24 Months

**Milestones**

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	12/93	03/95	12/95	12/96	12/96				
Delivery Date (Month/CY)	03/96	03/97	12/97	12/98					

**Installation Schedule**

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input								
Output								
FY-01								
Quarters	1 2 3 4							
Input								
Output								

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: EXT SEN, COMPUTERS AND DISPLAYS MN-50001A  
 Models of Aircraft Affected: E-3

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: E-3  
 PE 0207417F  
 Team INFO

Center: ESC - Hanscom AFB, MA

**Description/Justification**  
 This was to be the first phase of a two phase program to upgrade the E-3 legacy Mission System Computers, Display Processors, and Displays. It transitions AWACS to an open system architecture that allows the E-3 to take advantage of the rapid advances in computing technology. Production kits include: Replacement Digital Multiplexer (RDMX), Electronics Command Signal Programmer (ECSP), A-3 Card Replacement, Line Printer and Best of Breed Tracker (BBT). Due to operations tempo and training schedule conflicts, AC2ISR now allows for only two AWACS configurations which precludes this system from being installed. The 2 Sim/Trainer kits and the 11 Install Kits will not be installed and will be held for use in Block 40/45. Per the AWACS PMD, Step 1 (phase 1) and Step 2 (phase 2) are being combined into a single ACAT II program. Efforts will be accomplished as a single modification program and are included in MN-50001IT (Block 40/45 Upgrade). NRE is procured in each year due to varied production line start-ups and COTS DMS refresh. This modification also includes efforts for EFX in FY98 and FY99.

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

**Development Status**  
 10/96 - Development Award  
 08/97 - Spiral Demo #2  
 09/99 - S/W Verification/Qualification

<b>Projected Financial Plan</b>		PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)			55.6										
PROCUREMENT (3010)													
INSTALL KITS		4	1.4	7	2.3								
KITS NONRECUR													
EQUIPMENT		[4]	26.6	[7]	17.1								
EQUIP NONREC			23.4		1.1								
CHANGE ORDERS													
DATA			0.7		0.4								
SIM/TRAINER		[2]	7.0										
SUPPORT-EQUIP			5.9		0.1								
COMMON INTEG													
ICS					0.0								
SOFTWARE NONREC					0.3								
PROGRAM MNGMT			3.4		1.3								
CONTRACTOR SUPPORT			10.3		2.1								
OGC			3.3		3.3								
OTHER													

(Continued)

UNCLASSIFIED

Fact Sheet: E-3 MN-50001A EXT SEN, COMPUTERS AND DISPLAYS

**Projected Financial Plan Continued**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
INSTALLATION OF HARDWARE												
FY-96	1											
FY-97	1											
FY-98	2											
FY-99	7											
TOTAL INSTALL												
TOTAL COST (BP-1100)	4	82.1	7	28.0								

(Totals may not add due to rounding)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				55.6
PROCUREMENT (3010)				
INSTALL KITS			11	3.6
KITS NONRECUR				
EQUIPMENT			[11]	43.7
EQUIP NONREC				24.6
CHANGE ORDERS				
DATA				1.1
SIM/TRAINER			[2]	7.0
SUPPORT-EQUIP				5.9
COMMON INTEG				
ICS				0.0
SOFTWARE NONREC				0.3
PROGRAM MNGMT				4.8
CONTRACTOR SUPPORT				12.4
OGC				6.6
OTHER				
INSTALLATION OF HARDWARE				
FY-96	1	KITS		
FY-97	1	KITS		
FY-98	2	KITS		
FY-99	7	KITS		
TOTAL INSTALL				
TOTAL COST (BP-1100)			11	110.0

(Totals may not add due to rounding)

**Method of Implementation: DEPOT**

**Follow-On Lead Time: 12 Months**

## Milestones

Contract Date (Month/CY)  
Delivery Date (Month/CY)

## **Installation Schedule**

	<u>FY-94</u>			<u>FY-95</u>			<u>FY-96</u>			<u>FY-97</u>			<u>FY-98</u>			<u>FY-99</u>				
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Input																				
Output																				

02/15/2000

FY 2001 PBR

Modification Title and No: PDMA MN-50001P

Models of Aircraft Affected: E-3

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: E-3

Center: ESC - Hanscom AFB, MA

PE 0207417F

Team INFO

**Description/Justification**

These modifications to the E-3 mission equipment and aircraft systems are designed to keep the aircraft flying. One Periodic Depot Maintenance/Airframe (PDMA) kit includes a combination of the following: the installation of jack points, slats, air refueling amp, engine diagonal brace, SF-6 Load Scales, and High Frequency Radio Repair (HFRR), unless previously installed. These installations are necessary to sustain the reliability of the airframe. 'Install Kits' were purchased in prior years under MN-50001C. A total of 33 kits will be installed. 35 kits were purchased before the loss of one aircraft; one kit was used as a prototype.

Aircraft Breakdown: Active 33, Reserve 0, ANG 0

**Development Status**

N/A

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
INSTALL KITS	1	0.2				
KITS NONRECUR		2.9				
EQUIPMENT	[35]	1.1				
EQUIP NONREC						
CHANGE ORDERS						
DATA		0.2	0.1	0.1		
SIM/TRAINER						
SUPPORT-EQUIP		0.0	0.1	0.1	0.0	0.0
PROGRAM MNGMT		0.4	0.6	1.2	0.8	0.1
OGC						
INSTALLATION OF HARDWARE						
FY-96	[1]	0.1				
FY-98	[4]	0.6				
FY-99						
FY-00			[8]	1.3		
FY-01				[4]	0.3	
FY-02					[4]	0.2
FY-03						[1]
TOTAL INSTALL	5	0.7	11	0.8	8	1.3
					4	0.2
					1	0.1
TOTAL COST (BP-1100)	1	5.6	1.5	2.8	1.5	1.0
					0.2	0.2

(Totals may not add due to rounding)



(Continued)

UNCLASSIFIED

Fact Sheet: E-3 MN-50001P PDMA  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			1	0.2
KITS NONRECUR				2.9
EQUIPMENT			[35]	1.1
EQUIP NONREC				
CHANGE ORDERS				
DATA				0.4
SIM/TRAINER				
SUPPORT-EQUIP				
PROGRAM MNGMT				0.3
OGC				4.1
INSTALLATION OF HARDWARE				
FY-96			[1]	0.1
FY-98			[4]	0.6
FY-99			[11]	0.8
FY-00			[8]	1.3
FY-01			[4]	0.3
FY-02			[4]	0.2
FY-03			[1]	0.1
TOTAL INSTALL			33	3.3
TOTAL COST (BP-1100)			1	12.4

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 9 Months

Follow-On Lead Time: 9 Months

Milestones

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)	12/95	12/96							
Delivery Date (Month/CY)	09/96	09/97							

Installation Schedule

	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input		1		1	1	1	1	1
Output			1		1	1	1	1
Quarters	1 2 3 4							
Input								
Output								

02/15/2000

FY 2001 PBR

Modification Title and No: EXTEND SENTRY, RADAR SYSTEMS MN-50001R

Models of Aircraft Affected: E-3

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: ESC - Hanscom AFB, MA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: E-3 Class P

PE 0207417F Team INFO

**Description/Justification**

EXTEND SENTRY is a family of modifications to the E-3 mission equipment and aircraft systems that is designed to keep the aircraft flying into the 21st century. These improvements are required to sustain the aircraft. The EXTEND SENTRY radar group addresses surveillance radar failures, mission aborts, code 3's, and can not duplicate events. Several of the actions represent critically needed technology insertion of the radar transmit chain, which is currently dependent upon a declining capability. The funds on this P3A cover several separate, but related, E-3 sustainment efforts. As such, the 'Total Qty' column reflects the total of these separate modifications per year. FY99 funds for IFF are included in the Radar Systems, removed from 50001A. The IFF is included in FY94 (7) and in FY96, FY97, and FY99. (33 Aircraft -- 32 Operational and 1 Test Aircraft). The 0.606M for 'Sim/Trainer' in FY96 was for training.

Aircraft Breakdown: Active 33, Reserve 0, ANG 0

**Development Status**

Development line has all 3600 funds for all Extend Sentry projects, test asset/lab support, TS-3 PDM and program support.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		0.5										
PROCUREMENT (3010)												
INSTALL KITS	53	0.8										
KITS NONRECUR												
EQUIPMENT	[93]	14.4										
EQUIP NONREC		3.0		1.8								
CHANGE ORDERS												
DATA		2.4										
SIM/TRAINER		0.6										
SUPPORT-EQUIP		19.3										
FLT LINE LOADER												
PROGRAM MINGMT				0.0								
OGC		3.6										
INSTALLATION OF HARDWARE												
FY-96 53 KITS	[53]	1.0										
TOTAL INSTALL	53	1.0										
TOTAL COST (BP-1100)	53											
(Totals may not add due to rounding)				1.8								

(Continued)

UNCLASSIFIED

Fact Sheet: E-3 MN-50001R EXTEND SENTRY, RADAR SYSTEMS

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								0.5
PROCUREMENT (3010)								
INSTALL KITS					53			0.8
KITS NONRECUR								
EQUIPMENT					[93]			14.4
EQUIP NONREC								4.8
CHANGE ORDERS								
DATA								2.4
SIM/TRAINER								0.6
SUPPORT-EQUIP								19.3
FLT LINE LOADER								
PROGRAM MNGMT								0.0
OGC								3.6
INSTALLATION OF HARDWARE								
FY-96 53 KITS					[53]			1.0
TOTAL INSTALL					53			1.0
TOTAL COST (BP-1100)					53			47.0
(Totals may not add due to rounding)								

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 3 Months

Follow-On Lead Time: 0 Months

Milestones

Contract Date (Month/CY)	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
12/95			12/95								12/03	12/04
03/96			12/95								12/03	12/04

Installation Schedule

	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
Quarters	1	2	3	4	1	2	3	4	1	2	3	4
Input					1	2	3	4	1	2	3	4
Output					13	13	13	14				
					13	13	13	14				
Quarters	1	2	3	4	1	2	3	4	1	2	3	4
Input												
Output												

02/15/2000

FY 2001 PBR

Modification Title and No: INTEGRATED BROADCAST SERVICE MN-70001C

Models of Aircraft Affected: E-3

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ESC - Hanscom AFB, MA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: E-3 Class P

PE 0207417F Team INFO

**Description/Justification**

The Integrated Broadcast Service Stand-Alone Terminal provides US AWACS aircraft the capability to receive and display near-real time intelligence data broadcast via satellite networks (TIBS and TDDs). The program procures antennas, filters and receivers for 33 aircraft (32 Operational and 1 Test Aircraft) and carry-on processor-displays for only 8 aircraft (only 8 aircraft have IBS capability at any one time). This is a stand-alone system that is not integrated with the mission system. The program also procures six ground support terminals.

Aircraft Breakdown: Active 33, Reserve 0, ANG 0

**Development Status**

The 3600 funds support Concept Exploration and Program Definition/Risk Reduction efforts for DII-GCCS compliance and incremental plug-and-play software upgrades through spiral development within the Offensive-Air IPT. FY98 3600 funding begins PDRR for Cruise Missile Defense (CMD) upgrade.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		1.1										
PROCUREMENT (3010)												
INSTALL KITS	33	5.0										
KITS NONRECUR		1.5										
EQUIPMENT	[8]	2.4										
EQUIP NONREC		0.4				0.1						
CHANGE ORDERS												
DATA		2.3		0.1								
SIM/TRAINER	[2]	0.3										
SUPPORT-EQUIP	[4]	0.5		0.2								
TRAINING												
CONTRACTOR SUPPORT						0.7	0.7	1.2				1.2
ICS				0.1		0.1	0.1	0.1				0.0
PROGRAM MNGMT				0.0		0.1	0.1	0.1				0.1
OGC						0.0	0.0	0.1				0.0
INSTALLATION OF HARDWARE												
FY-97 33 KITS	[1]	0.2	[2]	0.1	[7]	0.3	[8]	0.3	[8]	0.3	[7]	0.3
TOTAL INSTALL	1	0.2	2	0.1	7	0.3	8	0.3	8	0.3	7	0.3
TOTAL COST (BP-1100)	33			0.5		1.2	1.2	1.2	1.8			1.6

(Totals may not add due to rounding)



02/15/2000

FY 2001 PBR

Modification Title and No: RADAR SYSTEM IMPROVEMENT PROGRAM MN-7266

Models of Aircraft Affected: E-3B/C

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ESC - Hanscom AFB, MA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: E-3

PE 0207417F Team INFO

**Description/Justification**

Funds concurrent acquisition and retrofit of the Radar System Improvement Program (RSIP) to enhance radar detection, Electronic Protection, and improve and expand radar maintenance capabilities. RSIP will provide additional computing capacity needed for future radar improvements and R&M. Group B Equip Non-recurring includes funding for Software Change Working Group and Diminished Manufacturing Sources (DMS). DMS cost was based on historical data from Japanese AWACS redesigns. Installation costs in FY98 include contractor integration and checkout to support the first install. The Sim/Trainer line reflects start-up costs for ASC/VW in FY97, 2 Sim/Trainers in FY98, and training in FY99 and FY00. Total of 33 Aircraft required--32 Operational and 1 Test. Current approved budget will fund 25 Aircraft. Funding for the remaining 7 kits is required beyond the FYDP.

Aircraft Breakdown: Active 33, Reserve 0, ANG 0

**Development Status**

Complete. IOT&amp;E Date: October 1996

**Projected Financial Plan**

	PRIOR QTY	FY-99		FY-00		FY-01		FY-02		FY-03	
		COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY
RDT&E (3600)											
PROCUREMENT (3010)											
INSTALL KITS	8	2.2	5	1.0	1	7.9	4	5.6	4	6.4	3
KITS NONRECUR		1.3				5.0					
EQUIPMENT	[8]	84.7	[5]	43.5	[1]	30.9	[4]	35.3	[4]	32.6	[3]
EQUIP NONREC		29.5		2.6							
CHANGE ORDERS						0.6		4.0		0.8	
DATA		1.2		0.3		1.0		0.6		0.3	
SIM/TRAINER	[2]	16.1		7.6		0.9					
SUPPORT-EQUIP		5.4		0.5		1.3		1.3		1.3	
COMMODITY MOD		0.7				0.1		3.4		1.9	
DMS (Diminished				2.7				4.4		3.0	
Manufacturing Sources)											
ENG SUPPORT				2.2				4.6		4.1	
DEPOT								2.0			
ICS						3.1		4.2			
OGC		6.5		1.6		0.2		0.2		0.1	
CONTRACTOR SUPPORT						2.9		3.0		2.6	
PROGRAM MNGMT						3.2		5.0		3.9	
GFE		3.3		0.3				0.3		0.4	

(Continued)

UNCLASSIFIED

Fact Sheet: E-3 MN-7266 RADAR SYSTEM IMPROVEMENT PROGRAM

Projected Financial Plan Continued

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
INSTALLATION OF HARDWARE												
FY-96	[1]	7.0	[1]	0.7	[1]	0.5	[2]	1.0	[1]	0.5	[4]	2.6
FY-97			[1]	0.7	[2]	1.0	[5]	2.6				
FY-98												
FY-99												
FY-00												
FY-01												
FY-02												
FY-03												
TOTAL INSTALL	1	7.0	2	1.5	3	1.5	7	3.6	1	0.5	4	2.6
TOTAL COST (BP-1100)	8	157.8	5	58.9	1	63.6	4	77.6	4	58.1	3	49.3

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: E-3 MN-7266 RADAR SYSTEM IMPROVEMENT PROGRAM  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					25	26.8		
KITS NONRECUR						6.3		
EQUIPMENT					[25]	252.7		
EQUIP NONREC						32.1		
CHANGE ORDERS						7.5		
DATA		0.6				4.2		
SIM/TRAINER					[2]	24.6		
SUPPORT-EQUIP		1.4				12.5		
COMMODITY MOD		0.1		0.1		7.9		
DMS (Diminished						12.5		
Manufacturing Sources)								
ENG SUPPORT		1.1				15.3		
DEPOT						2.5		
ICS						7.4		
OGC						8.7		
CONTRACTOR SUPPORT		1.0		0.9		12.2		
PROGRAM MNGMT		0.4		0.2		16.8		
GFE						4.3		
INSTALLATION OF HARDWARE								
FY-96					[2]	7.7		
2 KITS					[2]	1.2		
FY-97					[4]	2.0		
2 KITS					[5]	2.6		
FY-98					[1]	0.5		
4 KITS					[4]	2.6		
FY-99					[4]	2.1		
5 KITS					[3]	1.6		
FY-00								
1 KITS								
FY-01								
4 KITS								
FY-02		2.1		1.6				
4 KITS								
FY-03								
3 KITS								
TOTAL INSTALL	4	2.1	3	1.6	25	20.4		
TOTAL COST (BP-1100)		6.7		2.8	25	474.8		
(Totals may not add due to rounding)								

Method of Implementation: DEPOT  
Initial Lead Time: 24 Months  
Follow-On Lead Time: 24 Months

**Milestones**

Contract Date (Month/CY)  
Delivery Date (Month/CY)

	FY-93	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05
				03/96	12/96	12/97	12/98	12/99	12/00	12/01	12/02	12/03	12/04



**Installation Schedule**

UNCLASSIFIED

(Continued)

		<u>FY-93</u>				<u>FY-94</u>				<u>FY-95</u>				<u>FY-96</u>				<u>FY-97</u>				<u>FY-98</u>				<u>FY-99</u>				<u>FY-00</u>			
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
Input																																	
Output																																	
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
Input																																	
Output																																	

**Models of Aircraft Affected:**

## MODIFICATION OF AIRCRAFT

Center: ESC - Hanscom AFB, MA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: E-3 Class P

PE 0207417F  
Team INFO

## Description/Justification

The AWACS fleet requires VOR/ILS receiver kits (51RV-5B) to comply with the European FM Immunity implementation date of 1 Jan 2001. FM Immunity non-compliance poses potential safety and operational impacts. In recognition of the increased risk, nations will impose substantial operational restrictions upon aircraft, both civil and state, equipped with non-immune VHF receivers.

**NOTE:** These funds have been realigned for FM Immunity and will not be obligated pending Congressional notification and approval.

**Aircraft Breakdown:** Active 33, Reserve 0, ANG 0

### Development Status

N/A

### **Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
ICS												
TEST												
CONTRACT SUPPORT												
OGC												
PROGRAM MNGMT												
INSTALLATION OF H												
INSTALLATION OF HARDWARE												
FY-00												
33 KITS												
TOTAL INSTALL												
TOTAL COST (BP-1100)												
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: E-3 MN-DC101 FM IMMUNITY  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR							[33]	2.7
EQUIPMENT							33	
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.4
SIM/TRAINER								
SUPPORT-EQUIP								
ICS								0.4
TEST								0.3
CONTRACT SUPPORT								0.2
OGC								0.0
PROGRAM MNGMT								0.2
INSTALLATION OF H								0.0
INSTALLATION OF HARDWARE								
FY-00 33 KITS							[33]	
TOTAL INSTALL							33	
TOTAL COST (BP-1100)							33	4.3

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 8 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-00 FY-01  
Contract Date (Month/CY) 02/00  
Delivery Date (Month/CY) 10/00

**Installation Schedule**

	FY-00			FY-01		
Quarters	1	2	3	4	1	2
Input					22	11
Output					22	11

02/15/2000

FY 2001 PBR

Modification Title and No: SATCOM DAMA MN-T8135

Models of Aircraft Affected: E-3B/C

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ESC - Hanscom AFB, MA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: E-3

PE 0207417F Team INFO

**Description/Justification**

Per JCS direction, all UHF satcom users must migrate to the DAMA waveform. The DAMA waveform is a demand assigned multiple access wave form available in 5 Khz and 25 Khz bandwidths, depending on the DAMA network architecture being used. The frequencies used by this system are the same as existing legacy UHF SATCOM systems, but the DAMA wave form provides for far greater capacity, which is the reason the system is JCS directed. The Airborne UHF SATCOM System will consist of two Demand Assigned Multiple Access (DAMA) Terminals, and will also allow for growth of additional simultaneous channel operations. Each SATCOM Terminal will provide both UHF Satellite communication and Line of Sight communication capabilities. FY01 kits nonrecurring funds purchase a JTIC terminal. The JTIC, ALL, and TS-3 kits are militarily end useable items which will be delivered in FY02, FY03, and FY04. Approved funding will procure 2 of the required 33 kits (33 Aircraft -- 32 Operational and 1 Test Aircraft). Remaining kits and installations will require additional funding beyond the FYDP.

Aircraft Breakdown: Active 33, Reserve 0, ANG 0

**Development Status**

None Required - COTS Equipment - NDI

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RD&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR							0.7			7.8		5.9
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
ICS												
GFE												
OGC							0.3			0.4		0.5
CONTRACTOR SUPPORT							0.2			0.7		0.9
PROGRAM MNGMT							0.1			0.6		0.7
INSTALLATION OF HARDWARE												
FY-04												
2 KITS												
TOTAL INSTALL												
TOTAL COST (BP-1100)							1.3			9.5		8.1

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: E-3 MN-T8135 SATCOM DAMA  
(Continued)

		FY-04		FY-05		TO COMP		TOTAL	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)									
PROCUREMENT (3010)									
INSTALL KITS	2	1.4				2	1.4		
KITS NONRECUR		4.8					19.2		
EQUIPMENT		0.9					0.9		
EQUIP NONREC		0.1					0.1		
CHANGE ORDERS									
DATA		1.2					1.2		
SIM/TRAINER				[1]	0.3	[1]	0.3		
SUPPORT-EQUIP		0.7			1.6		2.3		
ICS									
GFE		0.5			0.5		1.0		
OGC		1.3			0.8		3.3		
CONTRACTOR SUPPORT		0.9			0.5		3.1		
PROGRAM MNGMT		0.7					2.1		
INSTALLATION OF HARDWARE									
FY-04	2	12.4		[2]	1.5	[2]	1.5		
2 KITS				2	1.5	2	1.5		
TOTAL INSTALL									
TOTAL COST (BP-1100)	2	12.4			5.1	2	36.3		
(Totals may not add due to rounding)									

Method of Implementation: DEPOT  
Initial Lead Time: 12 Months  
Follow-On Lead Time: 12 Months

**Milestones**

	FY-01	FY-02	FY-03	FY-04	FY-05
Contract Date (Month/CY)	10/00	10/01	10/02	10/03	10/04
Delivery Date (Month/CY)	10/01	10/02	10/03	10/04	10/05

**Installation Schedule**

	FY-01	FY-02	FY-03	FY-04	FY-05
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input				1	1
Output					1

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: E-4			
	1999	2000	2001	2002	2003	2004
						2005
<b>COST (In Mil)</b>	\$10.971	\$15.044	\$31.559	\$16.925	\$33.023	\$61.349
						\$38.780

This line item funds modifications to the E-4B aircraft. The four engine E-4B is a highly modified Boeing 747-200 airframe used in support of the mission of the National Airborne Operations Center (NAOC). NAOC provides the National Command Authorities with a survivable airborne command and control platform and gives the President ready access to the National Military Command System. The primary modification budgeted in FY01 is the Modified Miniature Receivers. Other modifications are budgeted to enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

MOD CLASS NR P	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
3149F	FLIGHT DATA RECORD	0.5	0.3	0.5						1.3
3149T	TRAFFIC ALERT & COL	1.5	1.1	1.2						7.9
3150	NAVSTAR GLOBAL POS	1.9	0.9	4.9						31.9
3410	NPES (NC2AIS) E-4B		0.3	0.8	0.9	0.5	0.5	0.6		3.7
3445	UNIVERSAL MODEM				3.9	0.4	0.4			4.7
3505	MODIFIED MINIATURE		5.2	19.7	6.9	1.6				33.4
4374	E-4 MISSION COMMUNI	3.4	3.4							20.7
4381	E-4B INFRASTRUCTUR					29.1	52.8	17.9		99.8
9702	8.33 KHZ VHF RADIO	0.2	0.5							1.1
9709	GLOBAL AIR TRAFFIC						5.2	19.6		24.9
9999S	SERVICE BULLETINS	1.7	1.0	1.0	2.7	0.9	1.5			24.2
9999X	LOW COST MODIFICATI	0.6	0.2	1.1	2.5	0.5	0.8	0.7		9.9
TAWS	TERRAIN AWARENESS	1.3	1.2	2.4						7.1
Z88888	REPROGRAMMINGS		0.9							0.9
TOTAL FOR CLASS P		11.0	15.0	31.6	16.9	33.0	61.3	38.8	0.0	271.6

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 58	PAGE NO. 1
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UNCLASSIFIED

## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: E-4			
	1999	2000	2001	2002	2003	2004
						2005
COST (In Mil)	\$10.971	\$15.044	\$31.559	\$16.925	\$33.023	\$61.349
						\$38.780

This line item funds modifications to the E-4B aircraft. The four engine E-4B is a highly modified Boeing 747-200 airframe used in support of the mission of the National Airborne Operations Center (NAOC). NAOC provides the National Command Authorities with a survivable airborne command and control platform and gives the President ready access to the National Military Command System. The primary modification budgeted in FY01 is the Modified Miniature Receivers. Other modifications are budgeted to enhance operational capability while improving flight safety, reliability, and maintainability. The specific modifications budgeted and programmed are below.

CLASS	MOD	MODIFICATION	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST	TOTAL
NR	NR	TITLE								TO GO	PROG.
			11.0	15.0	31.6	16.9	33.0	61.3	38.8	0.0	271.6
TOTAL FOR AIRCRAFT E-4											

Totals may not add due to rounding.

	P-1 SHOPP LIST ITEM NO. 58	PAGE NO. 2
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UNCLASSIFIED



PE 0302015F Team INFO

**Aircraft Breakdown:** Active 3, Reserve 0, ANG 0

## UNCLASSIFIED

UNCLASSIFIED

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RD&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS			3	0.0
KITS NONRECUR				
EQUIPMENT			[3]	0.4
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
INSTALLATION OF HARDWARE				
FY-99 1 KITS			[1]	0.3
FY-00 1 KITS			[1]	0.2
FY-01 1 KITS			[1]	0.3
TOTAL INSTALL			3	0.8
TOTAL COST (BP-1100)			3	1.3

(Totals may not add due to rounding)

Method of Implementation: CLS

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	06/99	03/00	10/00	
Delivery Date (Month/CY)	12/99	09/00	04/01	

**Installation Schedule**

	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input		1	1	1
Output			1	1

**Models of Aircraft Affected: E-4B**

UNCLASSIFIED

# MODIFICATION OF AIRCRAFT

ANCE SYSTEM MN-3149T

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: E-4  
Class P

PE 0302015F Team INFO

### **Description/Justification**

This is a GATM-Surveillance modification that installs TCAS II/Mode S. The Traffic Collision Avoidance System (TCAS) will provide a display for inbound aircraft traffic and provides both visual display corrective action and audible warning. Prototype install on contract and began install in Jun 99. The FY 99 installs are part of a combined modification effort which is scheduled in conjunction with depot maintenance. The FY 98 funded install began in Jun 99 due to aircraft availability. There are two FY01 installs. The install occurring 1st Qtr FY01 to be bought with FY00 funding. Schedule is critical. This mod is baselined with 3149F, 3150, TAWS and 4374.

**Aircraft Breakdown:** Active 4, Reserve 0, ANG 0

### Development Status

N/A.

## **Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
<b>RDT&amp;E (3600)</b>												
<b>PROCUREMENT (3010)</b>												
INSTALL KITS	1	0.4	1	0.1	1	0.1	1	0.1				
KITS NONREC		2.0										
EQUIPMENT	[1]	1.2	[1]	1.0	[1]	0.7	[1]	0.7				
EQUIP NONREC												
CHANGE ORDERS												
DATA		0.3										
<b>SIM/TRAINER</b>												
<b>SUPPORT-EQUIP</b>												
<b>INSTALLATION OF HARDWARE</b>												
FY-98	[1]	0.3										
1 KITS												
FY-99			[1]	0.3								
1 KITS					[1]	0.3						
FY-00												
1 KITS												
FY-01							[1]	0.3				
1 KITS												
TOTAL INSTALL	1	0.3	1	0.3	1	0.3	1	0.3				
<b>TOTAL COST (BP-1100)</b>												
	1	4.2	1	1.5	1	1.1	1	1.2				
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: E-4 MN-3149T TRAFFIC ALERT & COLLISION AVOIDANCE SYSTEM

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					4			0.8
KITS NONRECUR								2.0
EQUIPMENT					[4]			3.6
EQUIP NONREC								
CHANGE ORDERS								
DATA								0.3
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-98 1 KITS					[1]			0.3
FY-99 1 KITS					[1]			0.3
FY-00 1 KITS					[1]			0.3
FY-01 1 KITS					[1]			0.3
TOTAL INSTALL					4			1.2
TOTAL COST (BP-1100)					4			7.9
(Totals may not add due to rounding)								

Method of Implementation: CLS

Initial Lead Time: 15 Months

Follow-On Lead Time: 6 Months

Milestones

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)		03/98	06/99	03/00	10/00	
Delivery Date (Month/CY)		06/99	12/99	09/00	04/01	

Installation Schedule

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4
Input			1	1	1	
Output				1	1	1

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: NAVSTAR GLOBAL POSITIONING SYSTEM MN-3150  
 Models of Aircraft Affected: E-4B

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 CLC: E-4  
 PE 0302015F Team INFO

Center: OC-ALC - Tinker AFB Okla City, OK

**Description/Justification**

This is a Navigation Safety modification. The Navstar Global Positioning system (GPS) provides worldwide three-dimensional positioning/navigation for military aircraft. Satellites broadcast high accuracy data signals which are received by user equipment to compute platform position/velocity and provide steering vectors to target locations. This mod will include a 'glass cockpit', new Flight Management System (FMS) and replaces the Delco Carousel IV-AT INS with the LTN-92 ring laser gyro INS. Kits were purchased to install earlier but technical problems in program and problems with FAA certification delayed the program and increased cost. The prototype installation was completed in Aug 97, but was fielded with operational restrictions to STC. FY97 Change Orders funds corrections to lift these operational flight restrictions. FY99 funding not received until 3rd Qtr. As of 2nd Qtr FY00, no GPS installations have been completed. Mod is baselined with 3149F,3149T,TAWS & 4374.

Aircraft Breakdown: Active 4, Reserve 0, ANG 0

**Development Status**  
 N/A

**Projected Financial Plan**

RDT&E (3600)		PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
PROCUREMENT (3010)													
INSTALL KITS		1	1.1	1	0.0			2	0.0				
KITS NONRECUR			3.2										
EQUIPMENT		[1]	1.3	[1]	1.9			[2]	2.7				
EQUIP NONREC			3.1										
CHANGE ORDERS			13.1										
DATA			1.5						0.3				
SIM/TRAINER													
SUPPORT-EQUIP													
RETROFIT													
OGC			0.2										
INSTALLATION OF HARDWARE													
FY-94		[1]	0.8										
FY-99						[1]	0.9						
FY-01								[2]	1.9				
TOTAL INSTALL		1	0.8			1	0.9	2	1.9				
TOTAL COST (BP-1100)		1	24.2	1	1.9		0.9	2	4.9				

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: E-4 MN-3150 NAVSTAR GLOBAL POSITIONING SYSTEM  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					4			1.2
KITS NONRECUR								3.2
EQUIPMENT					[4]			5.9
EQUIP NONREC								3.1
CHANGE ORDERS								13.1
DATA								1.7
SIM/TRAINER								
SUPPORT-EQUIP								
RETROFIT								
OGC								0.2
INSTALLATION OF HARDWARE								
FY-94 1 KITS							[1]	0.8
FY-99 1 KITS							[1]	0.9
FY-01 2 KITS							[2]	1.9
TOTAL INSTALL					4			3.6
TOTAL COST (BP-1100)					4			31.9

(Totals may not add due to rounding)

Method of Implementation: CLS

Initial Lead Time: 21 Months

Follow-On Lead Time: 5 Months

Milestones

	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	01/94					05/99	10/00	10/00	
Delivery Date (Month/CY)	10/95					10/99	03/01	03/01	

Installation Schedule

	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
Input									
Output									
Quarters	1 2 3 4								
Input									
Output									

PE 0302015F Team INFO

## UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: E-4 MN-3410 NPES (NC2AIS) E-4B  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR		0.5		0.6			4	3.7
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-00	1	KITS					[1]	
FY-01	1	KITS					[1]	
FY-02	1	KITS					[1]	
FY-03	1	KITS					[1]	
TOTAL INSTALL							4	
TOTAL COST (BP-1100)		0.5		0.6			4	3.7
(Totals may not add due to rounding)								

Method of Implementation: CLS

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)				
Delivery Date (Month/CY)				

**Installation Schedule**

	FY-00	FY-01	FY-02	FY-03
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	1	1	1	1
Output	1	1	1	1



02/15/2000

FY 2001 PBR

Modification Title and No: MODIFIED MINIATURE RECEIVER TERMINAL MN-3505

Models of Aircraft Affected: E-4B, E-6B

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ESC - Hanscom AFB, MA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: E-4

PE 0303131F Team SPACE

# **Description/Justification**

The Modified Miniature Receive Terminal (MMRT) program modifies existing Miniature Receive Terminals (MRT) for installation and integration into the E-4B National Airborne Operations Center (NAOC) and the E-6 Take Charge and Move Out (TACAMO) fleets. MRT is a VLF/LF receiver currently operational in the B-1B and B-52H. Group B kits will be drawn from available spares and non-SIOP tasked bombers. MMRT is a Joint Program with the Air Force as lead agency. Per PMD, the Air Force is responsible for modifications to all existing MRTs in an effort to provide a common MMRT radio for both Air Force and Navy users. The Air Force is responsible for installing the MMRT on the E-4 while the Navy is responsible for installation on the E-6 aircraft. NAOC and TACAMO are essential components of the Nuclear Command and Control System.

Aircraft Breakdown: Active 4, Reserve 0, ANG 0

## **Development Status**

MMRT development is on contract to Rockwell Collins, Richardson Texas with HQ ESC/NDM as contracting agency. RDT&E funds modification of 12 MMRTs including the prototype kits, (procure, install and suitability tests) for E-4B and E-6B. Kits contain 3 each MMRTs. Remaining kits are procured with 3010 funds.

## **Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		11.4	1	8.1								
PROCUREMENT (3010)												
INSTALL KITS					1	0.4	1	0.4	1	0.4		
KIT'S NONRECUR						1.7						
EQUIPMENT					[3]	1.0	[46]	15.4	[13]	4.0		
EQUIP NONREC												
CHANGE ORDERS												
DATA						0.2		0.4		0.3		0.4
SIM/TRAINER					[3]	1.2		0.5				0.5
SUPPORT-EQUIP												
MOD OF SPARES					[2]	0.7	[8]	2.7	[6]	1.8	[1]	0.3
INSTALLATION OF HARDWARE					[1]							
FY-99 1 KITS												
FY-00 1 KITS							[1]	0.4				
FY-01 1 KITS									[1]	0.4		
FY-02 1 KITS											[1]	0.4
TOTAL INSTALL					1		1	0.4	1	0.4	1	0.4
TOTAL COST (BP-1100)			1		1	5.2	1	19.7	1	6.9		1.6

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: E-4 MN-3505 MODIFIED MINIATURE RECEIVER TERMINAL

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)	1				1	19.5		
PROCUREMENT (3010)								
INSTALL KITS					3	1.2		
KITS NONREC						1.7		
EQUIPMENT					[62]	20.4		
EQUIP NONREC						1.1		
CHANGE ORDERS						1.2		
DATA						1.2		
SIM/TRAINER					[3]			
SUPPORT-EQUIP								
MOD OF SPARES					[17]	5.5		
INSTALLATION OF HARDWARE								
FY-99 1 KITS					[1]			
FY-00 1 KITS					[1]	0.4		
FY-01 1 KITS					[1]	0.4		
FY-02 1 KITS					[1]	0.4		
TOTAL INSTALL					4	1.2		
TOTAL COST (BP-1100)					4	33.4		

(Totals may not add due to rounding)

Method of Implementation: CLS

Initial Lead Time: 5 Months

Follow-On Lead Time: 3 Months

Milestones

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)		01/00	10/00	12/01		
Delivery Date (Month/CY)		06/00	01/01	03/02		

Installation Schedule

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
Quarters	1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4 1 2 3	4
Input			1	1	1	
Output				1	1	1

PE 0302015F Team INFO

UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: E-4 MN-4374 E-4 MISSION COMMUNICATIONS UPGRADE  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					4		4	2.7
KITS NONRECUR								3.7
EQUIPMENT					[4]			8.4
EQUIP NONREC								
CHANGE ORDERS								
DATA								1.5
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-95 1 KITS							[1]	1.9
FY-97 1 KITS							[1]	0.8
FY-99 1 KITS							[1]	0.9
FY-00 1 KITS							[1]	0.9
TOTAL INSTALL					4		4	4.4
TOTAL COST (BP-1100)					4		4	20.7

(Totals may not add due to rounding)

Method of Implementation: CLS

Initial Lead Time: 6 Months

Follow-On Lead Time: 4 Months

#### Milestones

Contract Date (Month/CY)	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Delivery Date (Month/CY)	06/96	03/98	07/98	01/00	05/00		

#### Installation Schedule

Quarters	1	2	3	4	1	2	3	4	1	2	3	4
Input												
Output												

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: SERVICE BULLETINS MN-99999S  
 Models of Aircraft Affected: E-4B

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: E-4  
 PE 0302015F Team INFO

Center: OC-ALC - Tinker AFB Okla City, OK

**Description/Justification**  
 There are numerous miscellaneous modifications (service bulletins) anticipated for incorporation on the E-4. These service bulletins affect safety, product improvement, maintenance and reliability. Service bulletins are issued to correct FAA identified deficiencies.

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

**Development Status**  
 N/A

**Projected Financial Plan**

	FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)										
PROCUREMENT (3010)										
INSTALL KITS										
KITS NONRECUR										
EQUIPMENT										
EQUIP NONREC										
CHANGE ORDERS										
DATA										
SIM/TRAINER										
SUPPORT-EQUIP										
AIRCRAFT										
	15.4		1.7		1.0		1.0		2.7	
	15.4		1.7		1.0		1.0		2.7	
TOTAL COST (BP-1100)										
	15.4		1.7		1.0		1.0		2.7	
(Totals may not add due to rounding)										
									0.9	
									0.9	

(Continued)

UNCLASSIFIED

Fact Sheet: E-4 MN-99999S SERVICE BULLETINS  
(Continued)

	FY-04 QTY	COST	FY-05 QTY	COST	TO COMP QTY	COST	TOTAL QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
AIRCRAFT		1.5						24.2
TOTAL COST (BP-1100)		1.5						24.2
(Totals may not add due to rounding)								

Method of Implementation:

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-90

Contract Date (Month/CY)

Delivery Date (Month/CY)

02/15/2000

FY 2001 PBR

Modification Title and No: LOW COST MODIFICATIONS MN-99999X

Models of Aircraft Affected: E-4

Center: OC-ALC - Tinker AFB Okla City, OK

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT  
Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: E-4 Class P

PE 0302015F Team INFO

**Description/Justification**

These are low cost (less than \$900k) modifications which are necessary for reliability, maintainability, and/or improved system performance. Low cost mods funded in 98 are Nav Safety mods: Cockpit Voice Recorder (CVR), Digital Flight Data Recorder (DFDR), Emergency Locator Transmitter (ELT). Funded in 99 is the MPS BIU mod install.

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

**Development Status**

N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP	0.2											
AIRCRAFT	3.4		0.6	0.2	0.2	1.1	2.5	0.5				
TOTAL COST (BP-1100)	3.6		0.6	0.2	0.2	1.1	2.5	0.5				

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED									
Fact Sheet: E-4 MN-99999X LOW COST MODIFICATIONS									
(Continued)									
RDT&E (3600)									
PROCUREMENT (3010)									
INSTALL KITS									
KITS NONRECUR									
EQUIPMENT									
EQUIP NONREC									
CHANGE ORDERS									
DATA									
SIM/TRAINER									
SUPPORT-EQUIP									
AIRCRAFT									
		FY-04		FY-05		TO COMP		TOTAL	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST
			0.8		0.7				
TOTAL COST (BP-1100)			0.8		0.7				9.9
(Totals may not add due to rounding)									
Method of Implementation:									
				Initial Lead Time: 0 Months			Follow-On Lead Time: 0 Months		

**Milestones**

FY-93

Contract Date (Month/CY)

Delivery Date (Month/CY)



02/15/2000

FY 2001 PBR

Modification Title and No: TERRAIN AWARENESS & WARNING SYS (TAWWS) MN-TAWS

Models of Aircraft Affected: E-4B

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: OC-ALC - Tinker AFB Okla City, OK

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: E-4 Class P

PE 0302015F Team INFO

# **Description/Justification**

This is a Navigation Safety Modification. TAWS formerly called EGPWS increases pilot situation awareness by providing a 'look ahead' through the projection of the aircraft's position onto a digital database. It provides a visual graphic of terrain conflicts and substantially reduces many nuisance warnings. Prototype install on contract in FY98 and began install in Jun 99 due to aircraft availability. The FY 99 installs are part of a combined modification effort which is scheduled in conjunction with depot maintenance. This effort begins in FY 99 and ends in FY 00, and influences the installation quantity in the affected fiscal years. One of FY01 installs starts Oct 00. Must be on contract for a/c induction. Schedule critical. This mod is baselined with Mod #3149F, 3149T (TCAS), 3150 and 4374.

Aircraft Breakdown: Active 4, Reserve 0, ANG 0

## **Development Status**

N/A

## **Projected Financial Plan**

RDT&E (3600)

### PROCUREMENT (3010)

INSTALL KITS  
KITS NONREC  
EQUIPMENT  
EQUIP NONREC  
CHANGE ORDERS  
DATA

SIM/TRAINER

SUPPORT-EQUIP

### INSTALLATION OF HARDWARE

FY-98 1 KITS  
FY-99 1 KITS  
FY-00 1 KITS  
FY-01 1 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST
1 0.1	1 0.2	1 0.1	1 0.2			
[1] 0.5	[1] 0.8	[1] 0.8	[1] 0.8	[1] 0.8		
						1.1
[1] 0.3						
		[1] 0.3				
			[1] 0.3	[1] 0.3		
1 0.3	1 0.3	1 0.3	1 0.3	1 0.3		
1 2.2	1 1.3	1 1.2	1 2.4			

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UNCLASSIFIED

Fact Sheet: E-4 MN-TAWS TERRAIN AWARENESS & WARNING SYS (TAWS)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					4	0.6		
KITS NONRECUR						1.4		
EQUIPMENT					[4]	2.7		
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER						1.1		
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-98 1 KITS					[1]	0.3		
FY-99 1 KITS					[1]	0.3		
FY-00 1 KITS					[1]	0.3		
FY-01 1 KITS					[1]	0.3		
TOTAL INSTALL					4	1.3		
TOTAL COST (BP-11000)					4	7.1		

(Totals may not add due to rounding)

Method of Implementation: CLS

Initial Lead Time: 11 Months

Follow-On Lead Time: 8 Months

Milestones

	FY-98	FY-99	FY-00	FY-01	FY-02
Contract Date (Month/CY)	06/98	05/99	02/00	10/00	
Delivery Date (Month/CY)	05/99	01/00	10/00	06/01	

Installation Schedule

	FY-98	FY-99	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input		1	1	1	1
Output			1	1	1

## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: E-8B				
COST (In Mil)	1999	2000	2001	2002	2003	2004	2005
	\$43.522	\$28.346	\$33.389	\$16.161	\$13.518	\$13.572	\$45.259

This line item funds modifications to the E-8 aircraft. The E-8 is a modified Boeing 707-300 airframe called Joint Surveillance and Target Attack Radar System (JSTARS). The JSTARS was developed for ground surveillance, targeting and battle management. The primary modification budgeted in FY01 is the Computer Replacement Program (CRP). The specific modifications are budgeted and programmed below.

CLASS P	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
	38200	VANGUARD R&M						3.6	22.9		26.5
	38201	CRP (COMPUTER REPL	43.2	26.6	30.5	6.1	2.5	7.0			115.9
	38202	SATCOM (SATELLITE C			2.9	10.0	11.1	3.0			27.0
	9709	GLOBAL AIR TRAFFIC							22.3		22.3
	Z88888	REPROGRAMMINGS	0.3	1.7							2.1
TOTAL FOR CLASS P			43.5	28.3	33.4	16.2	13.5	13.6	45.3	0.0	193.8
TOTAL FOR AIRCRAFT E-8B			43.5	28.3	33.4	16.2	13.5	13.6	45.3	0.0	193.8

Totals may not add due to rounding.

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UNCLASSIFIED

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: CRP (COMPUTER REPLACEMENT PROGRAM) MN-38201  
 Models of Aircraft Affected: E-8C

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: E-8B  
 PE 0207581F Team INFO

Center: ESC - Hanscom AFB, MA

**Description/Justification**  
 Retrofit required due to actual/potential Diminishing Manufacturing Sources/parts obsolescence. This replaces the current Militarized General Purpose Computers, Operator Work Stations, Programmable Signal Processors, and Radar Control Units/Pulse Compression Units with COTS equivalents. Mod number changed from \_HEUTU to 38201.  
 Aircraft Breakdown: Active 7, Reserve 0, ANG 0

**Development Status**  
 The contract for the Engineering and Manufacturing Development (EMD) effort was awarded May 1997. RDT&E funds development of software required to integrate the new COTS Prime Mission Equipment (PME) into the Joint STARS configuration baseline. The final hardware configuration/selection has been confirmed (Final Design TIM - August 1998) and the risk associated with long-lead hardware procurement (for retrofit) concurrent with EMD completion activities is minimized. Test aircraft (T3) modification began on 5 April 1999 and was completed June 1999. Flight testing remains to be completed with a scheduled DD250 date of Apr 00.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		99.4		17.0		16.9						
PROCUREMENT (3010)												
INSTALL KITS			3	2.6	2	1.7	2	1.7				
KITS NONRECUR												
EQUIPMENT			[3]	35.4	[2]	21.5	[2]	23.4				
EQUIP NONREC												
CHANGE ORDERS												
DATA				0.7		0.4		0.3				
SIM/TRAINER												
SUPPORT-EQUIP				2.8		1.9		1.9				
INTEGRATION				1.6		1.1		0.7				
CONTRACT SUPPORT												
OGC												
INSTALLATION OF HARDWARE												
FY-99 3 KITS							[1]	2.5	[2]	6.1	[1]	2.5
FY-00 2 KITS												
FY-01 2 KITS												
TOTAL INSTALL							1	2.5	2	6.1	1	2.5
TOTAL COST (BP-1100)			3	43.2	2	26.6	2	30.5		6.1		2.5

(Totals may not add due to rounding)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								133.3
PROCUREMENT (3010)								
INSTALL KITS					7			6.1
KIT'S NONRECUR								
EQUIPMENT					[7]			80.2
EQUIP NONREC								
CHANGE ORDERS								
DATA								1.4
SIM/TRAINER								
SUPPORT-EQUIP								
INTEGRATION								6.7
CONTRACT SUPPORT								3.4
OGC								
INSTALLATION OF HARDWARE								
FY-99 3 KITS							[3]	8.6
FY-00 2 KITS	[1]	2.1					[2]	4.6
FY-01 2 KITS	[2]	4.9					[2]	4.9
TOTAL INSTALL	3	7.0					7	18.1
TOTAL COST (BP-1100)		7.0					7	115.9
(Totals may not add due to rounding)								

Method of Implementation: CONTRACTOR FACILITY  
 Initial Lead Time: 22 Months  
 Follow-On Lead Time: 22 Months

**Milestones**

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)			10/99	12/00	04/01			
Delivery Date (Month/CY)			08/01	10/02	02/03			

**Installation Schedule**

	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input								
Output								

02/15/2000

FY 2001 PBR

Modification Title and No: SATCOM (SATELLITE COMMUNICATIONS) MN-38202

Models of Aircraft Affected: E-8C

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ESC - Hanscom AFB, MA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: E-8B Class P

PE 0207581F Team INFO

**Description/Justification**

Modification required to retrofit thirteen (13) operational Joint STARS aircraft (will be accomplished via four (4) separate contract actions) with new basic Satellite Communications (SATCOM) capability. This modification provides for data transmit and receive and Demand Assigned Multiple Access (DAMA) in order to satisfy the User's (ACC) operational requirements. Modification allows the E-8C to transmit and receive UHF SATCOM voice and transmit digital data such as Synthetic Aperture Radar (SAR) and Moving Target Indicator (MTI)/Fixed Target Indicator (FTI) messages to beyond line-of-sight locations, such as Ground Station Modules (GSMs). Mod number changed from \_WHZZH to 38202.

Aircraft Breakdown: Active 13, Reserve 0, ANG 0

**Development Status**

The RDT&E contract was awarded 26 March 1999 for the Engineering and Manufacturing Development (EMD) effort. RDT&E funds development of software required to integrate the SATCOM Prime Mission Equipment (PME) into the Joint STARS configuration baseline. The final hardware configuration/selection will be confirmed during the middle of the EMD effort and the risk associated with long-lead hardware procurement (for retrofit) concurrent with EMD completion activities will be minimized. A System Design & Requirement TIM occurred on 18 August 1999. The Initial Design TIM is scheduled for March 2000 and Final Design TIM for September 2000.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS							2	1.3	6	3.7	5	2.8
KITS NONRECUR												
EQUIPMENT							[2]	1.2	[6]	3.7	[5]	2.9
EQUIP NONREC												
CHANGE ORDERS												
DATA												0.1
SIM/TRAINER												
SUPPORT-EQUIP												1.3
CONTRACT SUPPORT								0.4		1.7		1.8
OGC												
INSTALLATION OF HARDWARE												
FY-01 2 KITS									[2]	0.9	[6]	2.2
FY-02 6 KITS												
FY-03 5 KITS												
TOTAL INSTALL									2	0.9	6	2.2
TOTAL COST (BP-1100)							2	2.9	6	10.0	5	11.1

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: E-8B MN-38202 SATCOM (SATELLITE COMMUNICATIONS)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								47.7
PROCUREMENT (3010)								
INSTALL KITS					13			7.8
KITS NONRECUR								
EQUIPMENT					[13]			7.8
EQUIP NONREC								
CHANGE ORDERS		0.1						0.1
DATA								0.1
SIM/TRAINER								
SUPPORT-EQUIP								
CONTRACT SUPPORT		0.6						4.0
OGC		0.1						1.9
INSTALLATION OF HARDWARE								
FY-01 2 KITS					[2]			0.9
FY-02 6 KITS					[6]			2.2
FY-03 5 KITS	[5]	2.2			[5]			2.2
TOTAL INSTALL	5	2.2			13			5.3
TOTAL COST (BP-1100)		3.0			13			27.0
(Totals may not add due to rounding)								

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 12 Months Follow-On Lead Time: 12 Months

**Milestones**

Contract Date (Month/CY)  
Delivery Date (Month/CY)

	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
			03/01	03/02	03/03	03/04

**Installation Schedule**

	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input				2	3	2
Output				2	3	2

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: H-1			
	1999	2000	2001	2002	2003	2004
						2005
COST (In Mil)	\$1.835	\$0.250	\$3.535	\$0.480	\$0.475	\$0.628
						\$0.643

This line item funds modifications to the UH-1N aircraft. The two engine UH-1N is a light-lift, utility helicopter primarily used for missile site and range support and distinguished visitor airlift support. The primary modification budgeted in FY01 is the Traffic Alert and Collision Avoidance System. The specific modifications budgeted and programmed are below.

CLASS P-S	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
	99999A	LOW COST SAFETY MO	0.1	0.2	0.3	0.2	0.2	0.0	0.0	0.0	1.0
TOTAL FOR CLASS P-S											
P	3149T	TRAFFIC ALERT & COL			2.9	0.2					3.1
	3150	NAVSTAR GLOBAL POS	0.1								3.8
	8432	INTEGRATED DATA AC	0.9								9.6
	99999X	LOW COST MODIFICATI	0.8		0.3	0.1	0.3	0.6	0.6		2.8
	Z88888	REPROGRAMMINGS		0.1							0.1
TOTAL FOR CLASS P											
			1.8	0.1	3.3	0.3	0.3	0.6	0.6	0.0	19.4
TOTAL FOR AIRCRAFT H-1											
			1.9	0.3	3.5	0.5	0.5	0.6	0.6	0.0	20.4

Totals may not add due to rounding.

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02/15/2000

FY 2001 PBR

Modification Title and No: TRAFFIC ALERT & COLLISION AVOIDANCE SYSTEM MN-3149T

Models of Aircraft Affected: UH-1N

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0101235F Team SPACE

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Appropriation: Aircraft Procurement, Air Force  
CLC: H-1

Exhibit P3A Congressional

**Description/Justification**

Airborne System that enables detection and avoidance of other aircraft on intercepting flight paths. Operated with and in conjunction with on board IFF systems

Aircraft Breakdown: Active 19, Reserve 0, ANG 0

**Development Status**

N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR							19	2.5				
EQUIPMENT							[19]	0.2				
EQUIP NONREC												
CHANGE ORDERS												
DATA								0.2				
SIM/TRAINER												
SUPPORT-EQUIP												
INSTALLATION OF HARDWARE												
FY-01 19 KITS									[19]	0.2		
TOTAL INSTALL									19	0.2		
TOTAL COST (BP-11000)							19	2.9			0.2	

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: H-1 MN-3149T TRAFFIC ALERT & COLLISION AVOIDANCE SYSTEM

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR							19	2.5
EQUIPMENT							[19]	0.2
EQUIP NONREC								
CHANGE ORDERS								0.2
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-01 19 KITS							[19]	0.2
TOTAL INSTALL							19	0.2
TOTAL COST (BP-1100)							19	3.1
(Totals may not add due to rounding)								

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 12 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-01 FY-02 FY-03  
Contract Date (Month/CY) 02/01  
Delivery Date (Month/CY) 02/02

**Installation Schedule**

	FY-01			FY-02			FY-03		
Quarters	1	2	3	4	1	2	3	4	
Input					9	10			
Output							9	10	

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: LOW COST MODIFICATIONS MN-99999X  
 Models of Aircraft Affected: LOW COST MODIFICATIONS Center: WR-ALC Warner Robins AFB Warner Robins, GA  
 Description/Justification  
 Low cost modifications (under \$900K). Includes transmission fifth mount for the UH-1N.  
 Aircraft Breakdown: Active 0, Reserve 0, ANG 0  
 Development Status  
 N/A.

UNCLASSIFIED  
 MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
 Appropriation: Aircraft Procurement, Air Force  
 Class P  
 CLC: H-1  
 PE 0101235F Team SPACE

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
AIRCRAFT	0.0			0.8				0.3		0.1		0.3
TOTAL COST (BP-1100)				0.8				0.3		0.1		0.3
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: H-1 MN-99999X LOW COST MODIFICATIONS

(Continued)

FY-04		FY-05		TO COMP		TOTAL	
QTY	COST	QTY	COST	QTY	COST	QTY	COST

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

AIRCRAFT

0.6	0.6	0.6	0.6	2.8
TOTAL COST (BP-1100)				2.8

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

Milestones

FY-93

Contract Date (Month/CY)

Delivery Date (Month/CY)

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UNCLASSIFIED

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)							DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications				P-1 ITEM NOMENCLATURE: H-60			
	1999	2000	2001	2002	2003	2004	2005
COST (In Mil)	\$21.210	\$15.241	\$23.648	\$35.317	\$35.814	\$57.635	\$40.275

This line item funds modifications to the HH-60 helicopter. The HH-60 is a twin engine, aerial refuelable helicopter capable of performing combat search and rescue missions day or night. The overall goal of the modifications budgeted in FY01 is to install the -701 engine in the HH-60 and provide enhanced communications capability. The primary modification budgeted in FY01 is the Upgrade Communications and Navigation modification. The specific modifications budgeted and programmed are below.

MOD CLASS NR P	MODIFICATION TITLE	FY-99 0.5	FY-00 2.4	FY-01 4.8	FY-02 4.4	FY-03 0.9	FY-04 27.0	FY-05 7.6	COST TO GO 7.7	TOTAL PROG. 0.5
4569	INSTALLATION OF M-13									
6590	INSTALLATION OF SEL	3.7	2.4	4.8	4.4	0.9				16.2
8258	AN/AAQ-16B FLIR						27.0	7.6	7.7	57.7
8494	UPGRADE CDU TO 486			2.6						2.6
8560	SERVICE LIFE EXTENSI			3.5	7.6	7.8				18.9
99999X	LOW COST MODIFICATI			0.1	0.1	0.1	0.3	0.1	0.1	0.9
ARR	701C ENGINE AND GEA	11.8	1.4							21.5
T8415	UPGRADE COMMUNICA	4.7	11.1	12.7	23.3	27.1	30.4	32.7	24.3	167.9
Z88888	REPROGRAMMINGS	0.5	0.3							0.8
TOTAL FOR CLASS P		21.2	15.2	23.7	35.4	35.9	57.6	40.4	32.1	287.1
TOTAL FOR AIRCRAFT MH-60		21.2	15.2	23.7	35.4	35.9	57.6	40.4	32.1	287.1

Totals may not add due to rounding.

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UNCLASSIFIED

02/15/2000

FY 2001 PBR

Modification Title and No: INSTALLATION OF SELF PROTECTION SYSTEM MN-6590

Models of Aircraft Affected: HH60

Center: WR-ALC Warner Robins AFB Warner Robins, GA

UNCLASSIFIED

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: MH-60

PE 0207224F Team AIR

# **Description/Justification**

The USAF has established a requirement for the Electronic Combat Equipment for HH-60G helicopter. This modification will relocate the existing AN/APR-39A RWR antennas add the AN/AAR-47 Missile warning system (MWR) replace the M-130 CMDS with ECM system transmitter fairing and add provisions for future integration of these systems with the RWR.

Aircraft Breakdown: Active 39, Reserve 0, ANG 0

## **Development Status**

## **Projected Financial Plan**

RDT&E (3600)

### PROCUREMENT (3010)

INSTALL KITS  
KITS NONRECUR  
EQUIPMENT  
EQUIP NONREC  
CHANGE ORDERS  
DATA

SIM/TRAINER

SUPPORT-EQUIP

OGC

FLIGHT TEST

### INSTALLATION OF HARDWARE

FY-99 8 KITS  
FY-00 8 KITS  
FY-01 14 KITS  
FY-02 9 KITS

TOTAL INSTALL

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

	PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
INSTALL KITS			8	1.0	8	1.3	14	2.0	9	1.4		
KITS NONRECUR				0.1		0.1						
EQUIPMENT			[8]	0.7	[8]	0.8	[14]	1.5	[9]	0.8		
EQUIP NONREC												
CHANGE ORDERS												
DATA				0.1								
SIM/TRAINER				0.2		0.3		0.5		0.8		
SUPPORT-EQUIP				0.7		0.0		0.0		0.0		
OGC				0.3								
FLIGHT TEST												
INSTALLATION OF HARDWARE												
FY-99 8 KITS			[8]	0.7			[8]	0.8				
FY-00 8 KITS									[14]	1.4		
FY-01 14 KITS											[9]	0.9
FY-02 9 KITS											9	0.9
TOTAL INSTALL			8	0.7	8	2.4	14	4.8	9	4.4		
TOTAL COST (BP-1100)			8	3.7	8	2.4	14	4.8	9	4.4		



UNCLASSIFIED

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					39	5.7		
KITS NONRECUR						0.2		
EQUIPMENT					[39]	3.7		
EQUIP NONREC								
CHANGE ORDERS								
DATA						0.1		
SIM/TRAINER						1.7		
SUPPORT-EQUIP						0.8		
OGC						0.3		
FLIGHT TEST								
INSTALLATION OF HARDWARE								
FY-99 8 KITS						0.7	[8]	
FY-00 8 KITS						0.8	[8]	
FY-01 14 KITS						1.4	[14]	
FY-02 9 KITS						0.9	[9]	
TOTAL INSTALL					39	3.8		
TOTAL COST (BP-1100)					39	16.2		

(Totals may not add due to rounding)

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 6 Months

Follow-On Lead Time: 12 Months

Milestones

	FY-99	FY-00	FY-01	FY-02	FY-03
Contract Date (Month/CY)	01/00	01/00	01/01	01/02	
Delivery Date (Month/CY)	07/00	01/01	01/02	01/03	

Installation Schedule

	FY-99	FY-00	FY-01	FY-02	FY-03
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input		1	4 3 3 2	4 3 3 2	4 3 3 2
Output			1 4 3 3	4 3 3 2	4 3 3 2

02/15/2000

FY 2001 PBR

Modification Title and No: UPGRADE CDU TO 486 CONFIGURATION MN-8494

Models of Aircraft Affected:

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0207224F Team AIR

Appropriation: Aircraft Procurement, Air Force  
CLC: MH-60

Exhibit P3A Congressional

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

**Description/Justification**

Form/Fit/Function replacement for the i186CU on the current HH-60G fleet (less the 8 aircraft currently equipped with i486 CDUs). Modification will replace the CDU's on 97 aircraft and 2 simulators and modify 26 CDU spares to the upgraded configuration. Current CDU's are severely task-saturated and have no growth capability. Upgrade to the i486 CDU's will improve the reliability of the system. Modification will be a field level installation, taking approximately 8 hours. No software changes will be made to the CDU's it will use the current CDU software OPF version 10.

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

**Development Status**

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

OGC

MOD OF SPARES

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

PRIOR	FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					97	2.3				
						0.0				
					[2]	0.0				
						0.0				
						0.0				
						0.3				
					97	2.6				

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					97	2.3		
KITS NONRECUR						0.0		
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER					[2]	0.0		
SUPPORT-EQUIP								
OGC						0.0		
MOD OF SPARES						0.3		
TOTAL COST (BP-1100)					97	2.6		
(Totals may not add due to rounding)								

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

Milestones

FY-00

Contract Date (Month/CY)

Delivery Date (Month/CY)

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Fact Sheet: MH-60 MN-8560 SERVICE LIFE EXTENSION PROGRAM

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					8	6.6		
KITS NONRECUR					1	3.3		
EQUIPMENT								
EQUIP NONREC						0.2		
CHANGE ORDERS						0.4		
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
OGC						0.6		
INSTALLATION OF HARDWARE								
FY-01 1 KITS					[1]			
FY-02 4 KITS					[4]	4.0		
FY-03 4 KITS					[4]	3.8		
TOTAL INSTALL					9	7.8		
TOTAL COST (BP-1100)					9	18.9		

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

**Milestones**

	FY-01	FY-02	FY-03	FY-04
Contract Date (Month/CY)	12/00	10/01	10/02	
Delivery Date (Month/CY)	06/01	04/02	04/03	

**Installation Schedule**

	FY-01	FY-02	FY-03	FY-04
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	1	2	2	2
Output		1	2	2

FY 2001 PBR

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: MH-60 Class P

Modification Title and No: 701C ENGINE AND GEARBOX UPGRADE MN-ARR

Models of Aircraft Affected: HH-60G

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0503114F Team AIR

**Description/Justification**

Description/Justification
Replaces the UH-60L gearbox with an improved durability gearbox with rotary-brake. Also replaces the 700 engine with 701C engines and installs improved flight controls (ECP 451).

**Aircraft Breakdown:** Active 0, Reserve 0, ANG 13

### Development Status

N/A

### **Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS	6	0.1	7	0.1								
KITS NONRECUR		0.7										
EQUIPMENT	[6]	1.6	[7]	3.3								
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
ENGINE	[10]	5.9	[12]	7.0		0.1						
OGC				0.7		0.2						
INSTALLATION OF HARDWARE												
FY-98 6 KITS			[6]	0.7		1.1						
FY-99 7 KITS						[7]						
TOTAL INSTALL			6	0.7	7	1.1						
TOTAL COST (BP-1100)	6	8.2	7	11.8		1.4						
(Totals may not add due to rounding)												

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: MH-60 MN-ARR 701C ENGINE AND GEARBOX UPGRADE

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					13	0.2		
KITS NONRECUR						0.7		
EQUIPMENT					[13]	4.9		
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								0.1
SUPPORT-EQUIP								12.9
ENGINE					[22]	0.9		
OGC								
INSTALLATION OF HARDWARE								
FY-98 6 KITS							[6]	0.7
FY-99 7 KITS							[7]	1.1
TOTAL INSTALL							13	1.8
TOTAL COST (BP-1100)							13	21.5
(Totals may not add due to rounding)								

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-98	FY-99	FY-00	FY-01
Contract Date (Month/CY)	09/98			
Delivery Date (Month/CY)	09/99	06/00		

**Installation Schedule**

	FY-98		FY-99		FY-00		FY-01	
Quarters	1	2	3	4	1	2	3	4
Input				4	1	2	3	
Output				6	2	2	1	

02/15/2000

FY 2001 PBR

Modification Title and No: UPGRADE COMMUNICATIONS AND NAVIGATION/INTEGRATED E MN-T8415

Models of Aircraft Affected: HH-60G

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0207224F

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: MH-60 Class P

Team AIR

## UNCLASSIFIED

## MODIFICATION OF AIRCRAFT

**Description/Justification**

Modifies the HH-60G with upgraded communications and navigation (UCN) System to include SATCOM, cockpit integration and Night Vision Goggle (NVG) compatible cockpit lighting. This modification will provide the communications capability required for integration into the modern battlefield command, control and communications network. The cockpit integration portion of the modification corrects human factor deficiencies inherent in the original HH-60G GPS navigation upgrade modification. Required NVG compatible lighting will be provided by the elimination of unlighted com/nav equipment control heads during the cockpit integration effort. Incompatible lighted panels and controls will also be modified to compliance. Additionally the EW portion of the mod will install enhanced chaff/flare dispensers, missile warning system and an enhanced radar warning receiver. System will provide automated as well as manual flare chaff dispensing capability.

Aircraft Breakdown: Active 49, Reserve 0, ANG 0

**Development Status****Projected Financial Plan**

RDT&amp;E (3600)

## PROCUREMENT (3010)

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
INSTALL KITS	1	0.0	1	1.3	1	1.3
KITS NONREC		0.8		4.1		
EQUIPMENT	[1]	0.2	[1]	0.6	[8]	6.5
EQUIP NONREC						
CHANGE ORDERS			1.7	1.8		2.5
DATA				1.0		0.5
SIM/TRAINER	0.1			[1]		5.2
SUPPORT-EQUIP				1.5		1.3
ICS						0.3
OGC	0.1	0.2		1.0		0.9
FLIGHT TEST	0.4	2.8		1.0		0.8
INSTALLATION OF HARDWARE			[1]			
FY-98						
FY-00						
FY-01				[1]	0.3	
FY-02					[1]	0.5
FY-03						[8]
FY-04						2.7
FY-05						
FY-06						
TOTAL INSTALL			1	0.3	1	0.5
TOTAL COST (BP-1100)	1	1.6	1	11.1	8	23.3
(Totals may not add due to rounding)			4.7	12.7	9	27.1



	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS	11	14.3	12	16.0	6	8.2	49	62.8
KITS NONRECUR								4.9
EQUIPMENT	[11]	11.0	[12]	12.3	[6]	6.3	[49]	47.6
EQUIP NONREC								12.7
CHANGE ORDERS		1.2				2.5		1.5
DATA							[1]	7.7
SIM/TRAINER								3.4
SUPPORT-EQUIP								
ICS								
OGC		0.9		0.7		1.1		6.6
FLIGHT TEST								4.2
INSTALLATION OF HARDWARE								
FY-98							[1]	
FY-00							[1]	0.3
FY-01							[1]	0.5
FY-02							[8]	2.7
FY-03							[9]	3.0
FY-04							[11]	3.7
FY-05							[12]	4.1
FY-06							[6]	2.1
TOTAL INSTALL	9	3.0	11	3.7	18	6.3	49	16.5
TOTAL COST (BP-1100)	11	30.4	12	32.7	6	24.3	49	167.9
(Totals may not add due to rounding)								

Method of Implementation: CONTRACT FIELD TEAM

Initial Lead Time: 24 Months Follow-On Lead Time: 12 Months

Milestones

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07
Contract Date (Month/CY)	09/98	03/99	12/99	12/00	12/01	12/02	12/03	12/04	12/05	12/06
Delivery Date (Month/CY)	09/00	03/00	12/00	12/01	12/02	12/03	12/04	12/05	12/06	

Installation Schedule

	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input										
Output										

**Installation Schedule Continued**

		FY-06				FY-07			
		1	2	3	4	1	2	3	4
Quarters		1	2	3	4	1	2	3	4
Input	3	2	2	2	2	2	2	2	
Output	3	3	2	2	2	2	2	2	2

## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: Other			
	1999	2000	2001	2002	2003	2004
						2005
<b>COST (In Mil)</b>	\$15.865	\$20.065	\$28.214	\$91.312	\$103.172	\$119.704
						\$135.043

This line item funds modifications that apply to multiple weapon systems and weapon systems funded at less than \$2 million per year. The overall goal of the modifications budgeted in FY01 is to enhance capability and improve reliability and maintainability. The primary modification budgeted in FY01, UHF SATCOM/ANDVT/DAMA upgrade mod will provide modernized SATCOM terminals as mandated by the JCS. The specific modifications budgeted and programmed are shown below.

MOD CLASS P-S	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
		LOW COST SAFETY MO			0.1	0.2	0.2	0.2	0.3	0.0	0.9
TOTAL FOR CLASS P-S											
P	14212B	SUPPORT EQUIPMENT	0.0	0.0	0.1	0.2	0.2	0.2	0.3	0.0	0.9
	3150E9	NAVSTAR GPS (E-9)	0.1		0.1	0.1	0.1	0.1			0.2
	3429	A/B SINGARS AJ COM	2.3								52.2
	99999J	MISCELLANEOUS LOW		0.1	0.1	0.1	0.1				3.2
	99999U	LOW COST RETROFIT		0.2	2.6	1.1					3.9
	99999V	MISCELLANEOUS LOW	0.1	0.1							1.0
	99999X	LOW COST MODIFICATI	0.1	0.1	0.1	0.1	0.1	0.1	0.1		4.4
	A100	PRECISION ATTACK SY			10.7	12.2	18.2	24.2	12.8		78.1
	CMWS	COMMON MISSILE WAR				40.0	41.0	37.1	40.9	55.1	214.2
	E900	E-9A TELEMETRY SYST						5.8	5.3		11.1
	F16HTS	HARM TARGETING SYS	1.7								15.7
	HTSR7	F-16 HTS R7 POD UPGR						10.4	9.9	9.4	29.7
	T8137	UHF SATCOM/ANDVT/D	10.0	18.0	14.7	37.6	43.7	41.9	32.4	6.5	251.9
	T8138	AIRBORNE EHF							33.5	243.7	277.2

Totals may not add due to rounding.

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: Other			
	1999	2000	2001	2002	2003	2004
COST (In Mil)	\$15.865	\$20.065	\$28.214	\$91.312	\$103.172	\$119.704
						\$135.043

This line item funds modifications that apply to multiple weapon systems and weapon systems funded at less than \$2 million per year. The overall goal of the modifications budgeted in FY01 is to enhance capability and improve reliability and maintainability. The primary modification budgeted in FY01, UHF SATCOM/ANDVT/DAMA upgrade mod will provide modernized SATCOM terminals as mandated by the JCS. The specific modifications budgeted and programmed are shown below.

CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST IO GO	TOTAL PROG.
	T8174	HF MODERNIZATION	1.0	0.6							21.1
	Z88888	REPROGRAMMINGS	0.7	1.2							1.9
TOTAL FOR CLASS P			16.0	20.3	28.4	91.3	103.1	119.6	134.9	314.6	974.8
TOTAL FOR AIRCRAFT OTHER			16.0	20.3	28.5	91.5	103.3	119.8	135.1	314.6	975.6

Totals may not add due to rounding.

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662

UNCLASSIFIED

02/15/2000

FY 2001 PBR

Modification Title and No: A/B SINGGARS AJ COMM MN-3429

Models of Aircraft Affected: MULTI

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: OTHER

Center: WR-ALC Warner Robins AFB Warner Robins, GA

PE 0207423F Team C4I

**Description/Justification**

Modification incorporates airborne SINGGARS upgrades. The airborne SINGGARS will be placed on a repackaged existing VHF AJ Radio, which will be a form fit replacement for the current non AJ ARC-186. Note: SINGGARS - Single Channel Ground Air Radio System. FY98 funds for 19 MH-53J and 4 TH-53A SOF H-53 Pave Low helicopters.

Aircraft Breakdown: Active 992, Reserve 0, ANG 0

**Development Status**

FSD contract awarded May 87; DT&E/IOT&E Jan-Apr 89. Flight test Jan 89. Quality testing Nov 88-89.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		17.0										
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT	991	25.8										
EQUIP NONREC	1	15.1										
CHANGE ORDERS												
DATA		3.6										
SIM/TRAINER		1.9										
SUPPORT-EQUIP		2.7										
TEST PGM SETS		0.3		2.3								
INSTALLATION OF HARDWARE												
FY-96 0 KITS	[24]	0.5										
TOTAL INSTALL	24	0.5										
TOTAL COST (BP-1100)	992	49.9										
(Totals may not add due to rounding)												

(Continued)

UNCLASSIFIED

Fact Sheet: OTHER MN-3429 A/B SINGARS AJ COMM  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				17.0
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR			991	25.8
EQUIPMENT			1	15.1
EQUIP NONREC				
CHANGE ORDERS				
DATA				3.6
SIM/TRAINER				1.9
SUPPORT-EQUIP				2.7
TEST PGM SETS				2.6
INSTALLATION OF HARDWARE				
FY-96 0 KITS			[24]	0.5
TOTAL INSTALL			24	0.5
TOTAL COST (BP-1100)			992	52.2

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 18 Months

Follow-On Lead Time: 18 Months

**Milestones**

	FY-89	FY-90	FY-91	FY-92	FY-93	FY-94	FY-95	FY-96
Contract Date (Month/CY)	12/89		12/91	09/92	12/92	06/95	06/96	06/96
Delivery Date (Month/CY)	06/91		06/92	12/93	06/94	12/96	03/98	12/97



(Continued)

UNCLASSIFIED

Fact Sheet: OTHER MN-99999U LOW COST RETROFIT MODS  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	COST	QTY	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				
KITS NONRECUR			49	3.4
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
AIRCRAFT				0.2
INSTALLATION OF HARDWARE				
FY-01 35 KITS			[35]	0.2
FY-02 14 KITS			[14]	0.1
TOTAL INSTALL			49	0.3
TOTAL COST (BP-1100)			49	3.9

(Totals may not add due to rounding)

Method of Implementation: DEPOT FIELD TEAM

Initial Lead Time: 10 Months

Follow-On Lead Time: 10 Months

Milestones

	FY-00	FY-01	FY-02
Contract Date (Month/CY)	11/00	11/01	
Delivery Date (Month/CY)	09/01	09/02	

Installation Schedule

	FY-00	FY-01	FY-02
Quarters	1 2 3 4	1 2 3 4	1 2 3 4
Input	5 15 15 14	5 15 15 14	5 15 15 14
Output	5 15 15 14	5 15 15 14	5 15 15 14



02/15/2000

FY 2001 PBR

Modification Title and No: PRECISION ATTACK SYSTEMS PROCUREMENT MN-A100

Models of Aircraft Affected: LANTIRN SE for F-15E and F-16C/D

Center: WR-ALC Warner Robins AFB Warner Robins, GA

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: OTHER

PE 0207249F Team POWER

**Description/Justification**

This program will upgrade aging support equipment used for maintenance of Low Altitude Navigation and Targeting Infrared for Night (LANTIRN) pods. The targeting pod is the core of the Combat Air Forces (CAF) precision guided munitions (PGM) capability, the heart of F-15E and F-16BLK40 operations. The mission capable rate of the pods is directly related to the support equipment availability. Utilizing early 1980's technology, the equipment is in serious decline with excessive down-time due to obsolete parts and decreasing repair capability. The Support Equipment Mid-Life Upgrade (MLU) will replace obsolete parts with commercial off-the-shelf components, increase throughput by 70 percent, and provide for an AEF-tailored rapid deployment capability.

Aircraft Breakdown: Active 20, Reserve 0, ANG 1

**Development Status**

Engineering development for upgrade of LANTIRN Intermediate Automatic Test Equipment (LIATE) and Electro-Optical Test Station (EOTS) is in progress and funded under the Commercial Operations and Support Savings Initiative (COSSI) program with completion scheduled for Oct 00. RDT&E funding (3600) is required in FY01 and 02 for any further development and for completion of technical data and drawings.

**Projected Financial Plan**

		PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)									4.0				6.0
PROCUREMENT (3010)								3	10.7	3	12.2	5	18.2
INSTALL KITS													
KITS NONRECUR													
EQUIPMENT													
EQUIP NONREC													
CHANGE ORDERS													
DATA													
SIM/TRAINER													
SUPPORT-EQUIP													
INSTALLATION OF HARDWARE													
FY-01	3 KITS												
FY-02	3 KITS												
FY-03	5 KITS												
FY-04	7 KITS												
FY-05	3 KITS												
TOTAL INSTALL										3		3	
TOTAL COST (BP-1100)								3	10.7	3	12.2	5	18.2

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: OTHER MN-A100 PRECISION ATTACK SYSTEMS PROCUREMENT  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								10.0
PROCUREMENT (3010)								
INSTALL KITS	7	24.2	3	12.8			21	78.1
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-01 3 KITS								[3]
FY-02 3 KITS								[3]
FY-03 5 KITS	[5]							[5]
FY-04 7 KITS			[7]					[7]
FY-05 3 KITS					[3]			[3]
TOTAL INSTALL	5		7		3		21	
TOTAL COST (BP-1100)	7	24.2	3	12.8			21	78.1
(Totals may not add due to rounding)								

Method of Implementation: COMBINATION

Initial Lead Time: 12 Months Follow-On Lead Time: 12 Months

Milestones

	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06
Contract Date (Month/CY)	12/00	10/01	10/02	10/03	10/04	10/05
Delivery Date (Month/CY)	12/01	10/02	10/03	10/04	10/05	

Installation Schedule

	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06
Quarters	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input	1	1	1	1	1	1
Output	1	1	1	1	1	1

02/15/2000

FY 2001 PBR

Modification Title and No: HARM TARGETING SYSTEM MN-F16HTS

Models of Aircraft Affected: MULTI (F-16)

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: OTHER

Center: AAC Eglin AFB

PE 0207136F Team AIR

**Description/Justification**

The ASQ-213 Pod, a High Speed Anti-Radiation Missile (HARM) Targeting System (HTS), senses enemy radar emissions and provides targeting information for the F-16 Block 50/52. The F-16 HTS provides the only USAF reactive suppression of Enemy Air Defenses (SEAD) capability. There are 135 HTS Revision 5 (R5) pods. Contract was awarded Mar 98 for kits to upgrade pods to R6 configuration. FY98/99 procurement funding provided for contractor installation of R6 kits to improve performance of the HTS fleet. R6 upgrade improves HTS performance by reducing time needed to compute a targeting solution, increasing the number of targets that can be tracked and improving system ability to resolve ambiguities. Funding has been programmed in FY00-05 to continue next phase of HTS P31 development, upgrade of pods to R7 configuration. A separate P3A exhibit covers the R7 kit development and installations.

Aircraft Breakdown: Active 135, Reserve 0, ANG 0

**Development Status**

HTS is operational on the F-16. A development contract for R6 was awarded in FY96 to improve pod performance and assess life extension modifications. FY98/99 RDT&E funding completed R6 development and testing. Installation of R6 modification kits into the current fleet has been delayed due to issues with the F-16 Operational Flight Program (OFP) software upgrade (version 50T5). Because of compatibility requirements, the R6 installation schedule is tied directly to fielding of the F-16 50T5 OFP. There are no procurement funds in FY00/01 for installation of R6 kits. Approximately 100 installations are planned to be performed in FY01 due to the delay.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)		29.5		1.7								
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR	135	9.0										
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
OGC		1.3		1.4								
ICS		0.3										
INSTALLATION OF HARDWARE												
FY-98 135 KITS	[125]	3.4	[10]	0.3								
TOTAL INSTALL	125	3.4	10	0.3								
TOTAL COST (BP-1100)	135	13.9		1.7								
(Totals may not add due to rounding)												

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UNCLASSIFIED

Fact Sheet: OTHER MN-F16HTS HARM TARGETING SYSTEM  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								31.1
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR					135			
EQUIPMENT								9.0
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
OGC								2.7
ICS								0.3
INSTALLATION OF HARDWARE								
FY-98 135 KITS					[135]			3.7
TOTAL INSTALL					135			3.7
TOTAL COST (BP-1100)					135			15.7
(Totals may not add due to rounding)								

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 22 Months

Follow-On Lead Time: 0 Months

**Milestones**

Contract Date (Month/CY)  
03/98  
Delivery Date (Month/CY)  
01/00

**Installation Schedule**

	FY-96		FY-97		FY-98		FY-99		FY-00		FY-01		FY-02	
	Q	Y	Q	Y	Q	Y	Q	Y	Q	Y	Q	Y	Q	Y
Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Input									5				10	
Output										5			10	

02/15/2000  
FY 2001 PBR

Modification Title and No: UHF SATCOM/ANDVT/DAMA UPGRADE MN-T8137

Models of Aircraft Affected: MULTI

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ESC - Hanscom AFB, MA

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: OTHER

PE 0303601F Team SPACE

**Description/Justification**

Provides AFSOC and ACC with UHF upgrades. FY96-99 provides acquisition and installation of modernized UHF SATCOM terminals containing Demand Assigned Multiple Access (DAMA)/Advanced Narrowband Digital Voice Terminal (ANDVT), as mandated by the JCS for MILSATCOM access after 1 Oct 96 for entire AFSOC airborne fleet. AFSOC platforms include: AC-130H, AC-130U, MC-130H, MC-130E, EC-130E, MH-53J, MC-130P and contingencies. FY97 includes processor upgrades for installed terminals. FY98-03 provides acquisition and installation of state-of-the-art Airborne Integrated Terminal with embedded DAMA and ANDVT for ACC. Platforms include SOF aircraft, C4I aircraft, RC-135s and bombers. Kits NRE appears in each fiscal year (FY96-03) due to start up of different platform types in each year. Data is required for each different platform type. FY96-99 is contractor installation for the following AFSOC platforms: AC-130H, MH-53J, MC-130P & MC-130E. Installation for remaining platforms in FY96-99 are self-funded. Platforms in FY00-05 require contractor depot installation. The difference of 115 from those installed to those procured represents 53 portable terminals and 62 terminals which are user installs. B-2 program will receive B-Kits as GFE from MILSATCOM Terminals program. Funding for the B-2 B-kits are reflected in FY00-\$370; FY01-\$1.14; and FY02-\$2.46. Installs are funded by the B-2 program in FY03. FY99 Equipment costs higher than subsequent years due to low quantity/pre-production buy.

Aircraft Breakdown: Active 667, Reserve 0, ANG 0

**Development Status**

A-kits on install kit line and is one per B-kit bought in same year. Sim/trainer quantities:3 in FY99, 15 in FY00 and 2 in FY00 and 4 in FY02.

**Projected Financial Plan**

RDTE&E (3600)

**PROCUREMENT (3010)**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
INSTALL KITS	94	4.6	13	0.1	25	1.9	40	2.2	120	9.7	153	16.4
KITS NONREC		9.4		4.0		10.2		5.4		11.6		6.8
EQUIPMENT	[206]	23.1	[13]	2.8	[25]	2.5	[40]	4.1	[120]	11.3	[153]	14.7
EQUIP NONREC		1.5										
CHANGE ORDERS		0.8										
DATA		4.2						0.1		1.6		0.1
SIM/TRAINER		0.3	[3]	0.8	[15]	1.8	[2]	0.2	[4]	0.6		
SUPPORT-EQUIP		1.7		0.9		0.9		1.0		1.0		1.0
OGC												
INSTALLATION OF HARDWARE		1.5										
FY-97	55											
FY-98	39			1.4								
FY-99	13				[13]	0.7	[25]	1.6	[40]	1.9	[120]	4.5
FY-00	25											
FY-01	40											
FY-02	120											
FY-03	153											
FY-04	129											
FY-05	93											
TOTAL INSTALL	55	1.5	39	1.4	13	0.7	25	1.6	40	1.9	120	4.5
TOTAL COST (BP-1100)	94	47.2	13	10.0	25	18.0	40	14.7	120	37.6	153	43.7

(Totals may not add due to rounding)

UNCLASSIFIED

(Continued)

		FY-04		FY-05		TO COMP		TOTAL	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)									
PROCUREMENT (3010)									
INSTALL KITS	129	14.7	93	9.0		667		58.7	
KITS NONREC		5.9		6.3				59.7	
EQUIPMENT	[129]	12.6	[93]	9.4		[779]		80.5	
EQUIP NONREC								1.5	
CHANGE ORDERS								0.8	
DATA								6.1	
SIM/TRAINER		0.1				[24]		3.4	
SUPPORT-EQUIP								0.3	
OGC		1.0		1.0				9.6	
INSTALLATION OF HARDWARE									
FY-97 55 KITS						[55]		1.5	
FY-98 39 KITS						[39]		1.4	
FY-99 13 KITS						[13]		0.7	
FY-00 25 KITS						[25]		1.6	
FY-01 40 KITS						[40]		1.9	
FY-02 120 KITS						[120]		4.5	
FY-03 153 KITS	[153]	7.5	[129]	6.6		[153]		7.5	
FY-04 129 KITS						[129]		6.6	
FY-05 93 KITS						[93]	5.5	5.5	
TOTAL INSTALL	153	7.5	129	6.6	93	5.5	667	31.3	
TOTAL COST (BP-1100)	129	41.9	93	32.4		6.5	667	251.9	
(Totals may not add due to rounding)									

Method of Implementation: COMBINATION

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

Contract Date (Month/CY)  
Delivery Date (Month/CY)  
Contract Date (Month/CY)  
Delivery Date (Month/CY)

FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06	FY-07	FY-08
		09/96	12/96	12/97	06/99	12/99	12/00	12/01	12/01	12/02	12/03	12/04	12/05	12/06
		09/97	12/97	12/98	06/00	12/00	12/01	12/01	12/02	12/03	12/04	12/05	12/06	12/07
														12/08

**Installation Schedule**

FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01
Quarters 1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Input							
Output							

UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: OTHER MN-T8137 UHF SATCOM/ANDVT/DAMA UPGRADE

Installation Schedule Continued

		FY-02				FY-03				FY-04				FY-05				FY-06				FY-07				FY-08			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Quarters		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Input	10	10	10	10	27	31	31	31	39	38	38	38	38	33	32	32	24	24	24	21									
Output	6	10	10	10	10	10	32	31	31	31	39	38	38	38	33	32	32	24	22	21	21								

02/15/2000  
 FY 2001 PBR  
 Modification Title and No: HF MODERNIZATION MN-T8174  
 Models of Aircraft Affected: C5,C141,KC10,KC135  
 Center: WR-ALC Warner Robins AFB Warner Robins, GA  
 Appropriation: Aircraft Procurement, Air Force  
 CLC: OTHER  
 PE 0702207F  
 Team LOG  
 Exhibit P3A Congressional

**Description/Justification**  
 Provides simple air to ground coded signaling used internationally by commercial aviation and civil air traffic control stations to selectively alert aircrew that a call is being directed to their aircraft. Reduces aircrew requirement to continuously monitor RF radios, greatly reducing aircrew fatigue. Requires a modified ARC-190 and exclusive call LRU.

Aircraft Breakdown: Active 2914, Reserve 0, ANG 0

**Development Status**  
 N/A.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR		0.8										
EQUIPMENT	[2,490]	16.6	[224]	0.9	[200]	0.6						
EQUIP NONREC		0.3										
CHANGE ORDERS												
DATA		0.6										
SIM/TRAINER	[1]	0.3										
SUPPORT-EQUIP		0.3										
OGC		0.5		0.1								
TOTAL COST (BP-1100)		19.5		1.0		0.6						

(Totals may not add due to rounding)



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UNCLASSIFIED

Fact Sheet: OTHER MN-T8174 HF MODERNIZATION  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								0.8
EQUIPMENT							[2,914]	18.2
EQUIP NONREC								0.3
CHANGE ORDERS								
DATA								0.6
SIM/TRAINER							[1]	0.3
SUPPORT-EQUIP								0.3
OGC								0.6
TOTAL COST (BP-1100)								21.1

(Totals may not add due to rounding)

Method of Implementation: ORG/INTERMEDIATE

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

	FY-94	FY-95	FY-96	FY-97	FY-98	FY-99	FY-00
Contract Date (Month/CY)	12/94	12/95	12/96	12/97	12/98	12/99	12/00
Delivery Date (Month/CY)	12/95	12/96	12/97	12/98	12/99	12/00	12/01

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)										DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications					P-1 ITEM NOMENCLATURE: PRDT					
	1999	2000	2001	2002	2003	2004	2005			
COST (In Mil)	\$3.418	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000			\$0.000

Predator is an autonomous, long-dwell, unmanned reconnaissance system capable of operating over the horizon while providing real-time intelligence information to the Joint Task Force Commander. The air vehicle carries electro-optical (EO), Infra-Red (IR), and synthetic aperture radar (SAR) sensors, and is capable of transmitting near real time full motion video to the task force commander and throughout the operational theater. There are no modifications budgeted in FY01.

CLASS	MOD	MODIFICATION	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST	TOTAL
P	PRDT01	PREDATOR MODS	3.4							TO GO	PROG.
			3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
		TOTAL FOR CLASS P	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4

Totals may not add due to rounding.

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UNCLASSIFIED

02/15/2000

FY 2001 PBR

Modification Title and No: PREDATOR MODS MN-PRDT01

Models of Aircraft Affected: RQ-1A PREDATOR UAV

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: PRDT Class P

PE 0305205F Team AIR

Description/Justification

Predator is an autonomous, long-dwell, unmanned reconnaissance system capable of operating over the horizon while providing real-time intelligence information to the Joint Task Force Commander. The air vehicle carries electro-optical (EO), Infra-Red (IR), and synthetic aperture radar (SAR) sensors, and is capable of transmitting near real time full motion video to the task force commander and throughout the operational theater. To improve all-weather capability, in FY97 Congress provided funding (BP-10) for Unmanned Aerial Vehicle (UAV) Automatic Recovery Systems (UCARS) for 7 Predator systems (Group B); this modification purchases the remaining 5.

NOTE: This is a Congressionally directed program. Integration and test are funded in FY98 and FY99. Air Force is pursuing funding for installation of UCARS (Group A) on all 12 Predator systems.

Aircraft Breakdown: Active 5, Reserve 0, ANG 0

Development Status

Development and test contract awarded 15 Aug 98 and will complete in FY99.

Projected Financial Plan

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST
RDT&E (3600)	1.5		1.5			
PROCUREMENT (3010)						
INSTALL KITS						
KITS NONRECUR						
EQUIPMENT		5	3.4			
EQUIP NONREC						
CHANGE ORDERS						
DATA						
SIM/TRAINER						
SUPPORT-EQUIP						
INSTALLATION OF HARDWARE						
FY-99 5 KITS						
TOTAL INSTALL						
TOTAL COST (BP-1100)		5	3.4			

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: PRDT MN-PRDT01 PREDATOR MODS  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								3.0
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR							5	3.4
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-99 5 KITS								
TOTAL INSTALL							5	3.4
TOTAL COST (BP-1100)								
(Totals may not add due to rounding)								

Method of Implementation: CONTRACTOR FACILITY

Initial Lead Time: 8 Months

Follow-On Lead Time: 18 Months

**Milestones**

	<u>FY-97</u>	<u>FY-98</u>	<u>FY-99</u>
Contract Date (Month/CY)			05/99
Delivery Date (Month/CY)			01/00

**Installation Schedule**

	<u>FY-97</u>	<u>FY-98</u>	<u>FY-99</u>
Quarters	1	2	3
Input	2	3	4
Output	3	4	1

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)										DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications				P-1 ITEM NOMENCLATURE: Classified						
	1999	2000	2001	2002	2003	2004	2005			
COST (In Mil)	\$7.205	\$9.260	\$16.729	\$23.039	\$31.447	\$17.650	\$8.341			

This line item funds classified modifications to classified projects. The only classified modification budgeted in FY01 is Compass Call. The specific modifications budgeted and programmed are below.

CLASS	MOD	MODIFICATION	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST	TOTAL
P	NR	TITLE								TO GO	PROG.
	1001	COMPASS CALL	7.2	8.7	16.7	23.0	31.4	17.6	8.3		247.4
	Z88888	REPROGRAMMINGS		0.6							0.6
TOTAL FOR CLASS P			7.2	9.3	16.7	23.0	31.4	17.6	8.3	0.0	247.9
TOTAL FOR AIRCRAFT CLASSI			7.2	9.3	16.7	23.0	31.4	17.6	8.3	0.0	247.9

Totals may not add due to rounding.

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02/15/2000

FY 2001 PBR

Modification Title and No: COMPASS CALL MN-1001

Models of Aircraft Affected: MULTIPLE

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: CLASSI Class P

PE 0207253F Team INFO

**Description/Justification**

These funds are required to provide for the modification of aircraft and airborne systems used in classified missions, which because of their sensitive nature require the application of special management and security safeguards. Special justifications are provided through classified intelligence channels.

On 6 Jan 00, the Air Force notified Congress of it's intent to initiate a new activity named PROJECT SUTER. This new start is an initiative to demonstrate the synergistic effects of integrating the operations of intelligence collectors (RC-135 RIVET JOINT) and electronic warfare aircraft (EC-130H COMPASS CALL).

Aircraft Breakdown: Active 14, Reserve 0, ANG 0

**Development Status**

N/A.

**Projected Financial Plan**

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KITS NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

CLASSIFIED

TIBS

RCVRS

PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST
133.7	7.2	6.5	7.0	7.1	7.0
0.6		2.2	9.7	15.9	24.4
134.3	7.2	8.7	16.7	23.0	31.4

TOTAL COST (BP-1100)

(Totals may not add due to rounding)



(Continued)

UNCLASSIFIED

Fact Sheet: CLASSI MN-1001 COMPASS CALL  
(Continued)

	FY-04 QTY	COST	FY-05 QTY	COST	TO COMP QTY	COST	TOTAL QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
CLASSIFIED								
TIBS								168.5
RCVRS		17.6		8.3				0.6
								78.3
TOTAL COST (BP-1100)		17.6		8.3				247.4
(Totals may not add due to rounding)								
Method of Implementation: ORG/INTERMEDIATE								
Initial Lead Time: 0 Months								
Follow-On Lead Time: 0 Months								

Milestones

FY-92

Contract Date (Month/CY)  
Delivery Date (Month/CY)

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## UNCLASSIFIED

BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)						DATE February 2000
APPROPRIATION/BUDGET ACTIVITY AIRCRAFT PROCUREMENT-AIR FORCE/Aircraft Modifications			P-1 ITEM NOMENCLATURE: DARP			
	1999	2000	2001	2002	2003	2004
						2005
COST (In Mil)	\$137.201	\$234.385	\$165.540	\$163.183	\$141.628	\$98.495
						\$109.447

This line item funds classified modifications to the Defense Airborne Reconnaissance Program aircraft. The primary modification budgeted in FY01 is Rivet Joint. The specific modifications budgeted and programmed are below.

CLASS	MOD NR	MODIFICATION TITLE	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	COST TO GO	TOTAL PROG.
P	3009R	REENGINE	56.2	120.0	59.9	84.9	69.7	13.2	9.0		585.6
	4263	RIVET JOINT	65.3	62.9	79.0	49.9	47.0	55.5	65.8		593.0
	4265	COMBAT SENT	7.7	8.1	8.3	8.1	8.7	9.0	9.2		65.8
	4488	U-2 SYERS		5.0							5.0
	4493	U-2 POWER	9.6	9.1	9.9	8.9	9.0	9.2	9.4		65.3
	4500	U-2 COCKPIT UPGRAD		10.0							10.0
	4600	U-2 DUAL DATA LINK (D		3.5	8.4	8.4	4.2	8.4	12.6		45.5
	SCOUT	ANG SENIOR SCOUT			3.0	3.0	3.1	3.2	3.4		12.8
	Z88888	REPROGRAMMINGS	0.1	15.7							23.1
TOTAL FOR CLASS P			138.8	234.4	165.5	163.2	141.6	98.5	109.4	0.0	1,406.1
TOTAL FOR AIRCRAFT DARP			138.8	234.4	165.5	163.2	141.6	98.5	109.4	0.0	1,406.1

Totals may not add due to rounding.

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UNCLASSIFIED

02/15/2000

FY 2001 PBR

Modification Title and No: REENGINE MN-3009R

Models of Aircraft Affected: RC-135

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
Class P  
CLC: DARP

PE 0305207F Team INFO

**Description/Justification**

Modifies RC-135 aircraft with more powerful, fuel efficient F108 (CFM-56) engines, allowing takeoff on shorter runways with higher gross weights. The cleaner, quieter F108 engines meet or exceed all noise and pollution standards. Over 25 other systems/sub-systems, including the landing gear, will extend the life of these aircraft into the 21ST Century. Group B items (equipment) are individual engines, not aircraft. NOTES: FY00 Congressional add of \$80.08M included; 2 Engine Kits = \$60M.

Aircraft Breakdown: Active 20, Reserve 0, ANG 0

**Development Status**

Engineering activities underway.

**Projected Financial Plan**

RDT&amp;E (3600)

**PROCUREMENT (3010)**

	PRIOR QTY	COST 31.2	FY-99 QTY	COST	FY-00 QTY	COST	FY-01 QTY	COST	FY-02 QTY	COST	FY-03 QTY	COST
INSTALL KITS	7	72.1	2	21.9	4	43.2	2	24.8	3	31.3	2	24.1
KITS NONREC		5.7		0.6		3.3				3.3		
EQUIPMENT	[28]	82.3	[8]	28.0	[16]	55.0	[8]	27.5	[12]	41.3	[8]	27.5
EQUIP NONREC		2.4		1.3						0.5		1.5
CHANGE ORDERS		2.6		0.2								5.0
DATA		1.0	[1]	0.8								
SIM/TRAINER	[1]	1.5				1.8						3.0
SUPPORT-EQUIP												
TEST												

**INSTALLATION OF HARDWARE**

	PRIOR QTY	COST	FY-99 QTY	COST	FY-00 QTY	COST	FY-01 QTY	COST	FY-02 QTY	COST	FY-03 QTY	COST
FY-96 2 KITS	[2]	3.4										
FY-97 4 KITS	[1]	1.7										
FY-98 1 KITS				3.4	[1]	4.2						
FY-99 2 KITS					[1]	4.2						
FY-00 4 KITS					[2]	8.3						
FY-01 2 KITS							[2]	7.6	[2]	8.5	[2]	8.6
FY-02 3 KITS												
FY-03 2 KITS												

TOTAL INSTALL

3	5.1	2	3.4	4	16.7	2	7.6	2	8.5	2	8.6
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TOTAL COST (BP-1100)

7	172.8	2	56.2	4	120.0	2	59.9	3	84.9	2	69.7
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(Totals may not add due to rounding)

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UNCLASSIFIED

(Continued)

UNCLASSIFIED

Fact Sheet: DARP MN-3009R REENGINE  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								31.2
PROCUREMENT (3010)								
INSTALL KITS					20	217.4		
KITS NONRECUR						12.8		
EQUIPMENT					[80]	261.6		
EQUIP NONREC						5.7		
CHANGE ORDERS						7.8		
DATA						1.8		
SIM/TRAINER					[2]	3.3		
SUPPORT-EQUIP						3.0		
TEST								
INSTALLATION OF HARDWARE								
FY-96	2	KITS			[2]	3.4		
FY-97	4	KITS			[4]	9.3		
FY-98	1	KITS			[1]	4.2		
FY-99	2	KITS			[2]	8.3		
FY-00	4	KITS			[4]	16.1		
FY-01	2	KITS			[2]	8.6		
FY-02	3	KITS			[3]	13.2		
FY-03	2	KITS			[2]	9.0		
TOTAL INSTALL	3	13.2	2	9.0	20	72.1		
TOTAL COST (BP-1100)		13.2		9.0	20	585.6		
(Totals may not add due to rounding)								

Method of Implementation: DEPOT

Initial Lead Time: 24 Months

Follow-On Lead Time: 24 Months

**Milestones**

	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03	FY-04	FY-05	FY-06
Contract Date (Month/CY)	09/96	12/96	07/98	04/99	12/99	12/00	12/01	12/02	12/03	12/04	
Delivery Date (Month/CY)	09/98	12/98	07/00	04/01	12/01	12/02	12/03				

**Installation Schedule**

	FY-96	FY-97	FY-98	FY-99	FY-00	FY-01	FY-02	FY-03
Quarters	1	2	3	4	1	2	3	4
Input			1	1	1	1	1	1
Output				1	1	1	1	1
Quarters	1	2	3	4	1	2	3	4
Input	1	1	1	1	1	1	1	1
Output	1	1	1	1	1	1	1	1

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: DARP  
PE 0305207F  
Team INFO

02/15/2000  
FY 2001 PBR  
Modification Title and No: RIVET JOINT MN-4263  
Models of Aircraft Affected: RC-135  
Center: ASC - Wright Patterson AFB, OH

**Description/Justification**

Procures and installs various classified modifications for RC-135 aircraft. This mod has multiple contract and delivery dates. Specific quantities and schedules of these modifications are classified and therefore not listed.

NOTES: FY00 Congressional add of \$80.08M included; Quick Reaction Capability = \$10M, & Theater Airborne Warning System (TAWS) = \$10.8M.

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

**Development Status**

Classified in nature. Development status can be provided upon request.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS		167.7		65.3		62.9		79.0		49.9		47.0
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
TOTAL COST (BP-1100)		167.7		65.3		62.9		79.0		49.9		47.0

(Totals may not add due to rounding)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS		55.5		65.8				593.0
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
TOTAL COST (BP-1100)		55.5		65.8				593.0
(Totals may not add due to rounding)								
Method of Implementation: DEPOT/FIELD TEAM								
Initial Lead Time: 12 Months				Follow-On Lead Time: 12 Months				

Milestones

FY-97

Contract Date (Month/CY)

Delivery Date (Month/CY)

Installation Schedule

Quarters	1	2	3	4
Input				
Output				

02/15/2000

FY 2001 PBR

Modification Title and No: COMBAT SENT MN-4265

Models of Aircraft Affected: RC-135U

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: DARP Class P

PE 0305207F Team INFO

**Description/Justification**

Procures and installs various classified modifications for RC-135 aircraft. This mod has multiple contract and delivery dates. Specific quantities and schedules of these modifications are classified and therefore not listed.

Aircraft Breakdown: Active 0, Reserve 0, ANG 0

**Development Status**

Classified in nature. Development status can be provided upon request.

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS		6.7		7.7		7.0		7.1		8.1		8.7
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
IPBD												
TOTAL COST (BP-1100)		6.7		7.7		8.1		8.3		8.1		8.7
(Totals may not add due to rounding)												



UNCLASSIFIED

	FY-04 QTY	COST	FY-05 QTY	COST	TO COMP QTY	COST	TOTAL QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS		9.0		9.2				63.4
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
IPBD								2.4
TOTAL COST (BP-1100)		9.0		9.2				65.8

(Totals may not add due to rounding)

Method of Implementation: DEPOT/FIELD TEAM

Initial Lead Time: 0 Months

Follow-On Lead Time: 0 Months

**Milestones**

FY-97

Contract Date (Month/CY)

Delivery Date (Month/CY)

**Installation Schedule**

	<u>FY-97</u>
Quarters	1 2 3 4
Input	
Output	

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

02/15/2000  
FY 2001 PBR  
Modification Title and No: U-2 SYERS MN-4488  
Models of Aircraft Affected: U-2  
Center: ASC - Wright Patterson AFB, OH  
Appropriation: Aircraft Procurement, Air Force  
CLC: DARP  
PE 0305202F  
Team INFO  
Exhibit P3A Congressional

**Description/Justification**

Funding for polarization research for Senior Year Electro-Optical System (SYERS) sensor. This program received a \$5M Congressional add for SYERS on U-2 in FY00.

Aircraft Breakdown: Active 35, Reserve 0, ANG 0

**Development Status**

N/A

**Projected Financial Plan**

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)						
PROCUREMENT (3010)						
INSTALL KITS			3			
KITS NONRECUR						
EQUIPMENT						
EQUIP NONREC						
CHANGE ORDERS						
DATA						
SIM/TRAINER						
SUPPORT-EQUIP						
INSTALLATION OF HARDWARE						
FY-00 3 KITS						
TOTAL INSTALL						
TOTAL COST (BP-1100)			3			
(Totals may not add due to rounding)						

(Continued)

UNCLASSIFIED

Fact Sheet: DARP MN-4488 U-2 SYERS  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS					3			5.0
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
INSTALLATION OF HARDWARE								
FY-00 3 KITS								
TOTAL INSTALL								
TOTAL COST (BP-1100)					3			5.0

(Totals may not add due to rounding)

Method of Implementation: DEPOT

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

FY-00

Contract Date (Month/CY)

Delivery Date (Month/CY)

**Installation Schedule**

FY-00

Quarters 1 2 3 4

Input

Output

02/15/2000

FY 2001 PBR

Modification Title and No: U-2 POWER MN-4493

Models of Aircraft Affected: U-2

UNCLASSIFIED

MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: DARP

PE 0305202F Team INFO

Description/Justification

Specific modifications are classified. The funding will be used to improve aircraft power distribution and performance. These modifications are necessary for the aircraft to maintain its mission effectiveness in conjunction with changing mission requirements.

Aircraft Breakdown: Active 35, Reserve 0, ANG 0

Development Status

N/A.

Projected Financial Plan

RDT&E (3600)

PROCUREMENT (3010)

INSTALL KITS

KIT'S NONRECUR

EQUIPMENT

EQUIP NONREC

CHANGE ORDERS

DATA

SIM/TRAINER

SUPPORT-EQUIP

TOTAL COST (BP-1100)

(Totals may not add due to rounding)

PRIOR QTY	COST	FY-99		FY-00		FY-01		FY-02		FY-03	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
		6	9.6	6	9.1	6	9.9	6	8.9	6	9.0
		6	9.6	6	9.1	6	9.9	6	8.9	6	9.0

(Continued)

UNCLASSIFIED

Fact Sheet: DARP MN-4493 U-2 POWER  
(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS	4	9.2	1	9.4			35	65.3
KITS NONRECUR								
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
TOTAL COST (BP-1100)	4	9.2	1	9.4			35	65.3
(Totals may not add due to rounding)								

Method of Implementation:

Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones**

FY-99

Contract Date (Month/CY)

Delivery Date (Month/CY)

02/15/2000

FY 2001 PBR

Modification Title and No: U-2 COCKPIT UPGRADE MN-4500

Models of Aircraft Affected: U-2

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

Center: ASC - Wright Patterson AFB, OH

Exhibit P3A Congressional  
Appropriation: Aircraft Procurement, Air Force  
CLC: DARP Class P

PE 0305202F Team INFO

Description/Justification

Reconnaissance Avionics Modernization Program (RAMP) and Defensive System upgrades. The \$10M Congressional add in FY00 is for Defensive Systems to purchase 35 multi-function displays and 7 Band-Aid jammers. Funds will be obligated by 3rd Qtr FY00.

Aircraft Breakdown: Active 35, Reserve 0, ANG 0

Development Status

N/A

Projected Financial Plan

	PRIOR	FY-99	FY-00	FY-01	FY-02	FY-03
	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST	QTY COST
RDT&E (3600)						
PROCUREMENT (3010)						
INSTALL KITS			35			
KITS NONRECUR						
EQUIPMENT						
EQUIP NONREC						
CHANGE ORDERS						
DATA						
SIM/TRAINER						
SUPPORT-EQUIP						
INSTALLATION OF HARDWARE						
FY-00 35 KITS						
TOTAL INSTALL			35			
TOTAL COST (BP-1100)			35			10.0

(Totals may not add due to rounding)

(Continued)

UNCLASSIFIED

Fact Sheet: DARP MN-4500 U-2 COCKPIT UPGRADE  
(Continued)

	FY-04	FY-05	TO COMP	TOTAL
	QTY	QTY	QTY	QTY
	COST	COST	COST	COST
RDT&E (3600)				
PROCUREMENT (3010)				
INSTALL KITS				35
KITS NONRECUR				10.0
EQUIPMENT				
EQUIP NONREC				
CHANGE ORDERS				
DATA				
SIM/TRAINER				
SUPPORT-EQUIP				
INSTALLATION OF HARDWARE				
FY-00 35 KITS				
TOTAL INSTALL				
TOTAL COST (BP-1100)			35	10.0
(Totals may not add due to rounding)				
Method of Implementation: DEPOT/FIELD TEAM				
Initial Lead Time: 0 Months				
Follow-On Lead Time: 0 Months				

Milestones

FY-00

Contract Date (Month/CY)  
Delivery Date (Month/CY)

Installation Schedule

	FY-00
Quarters	1 2 3 4
Input	
Output	

UNCLASSIFIED  
MODIFICATION OF AIRCRAFT

02/15/2000  
FY 2001 PBR  
Modification Title and No: U-2 DUAL DATA LINK (DDL) MN-4600  
Models of Aircraft Affected: U-2  
Center: ASC - Wright Patterson AFB, OH  
Appropriation: Aircraft Procurement, Air Force  
CLC: DARP  
PE 0305202F  
Team INFO  
Exhibit P3A Congressional

**Description/Justification**  
The funding will be used for improved data links (doubles the band width). These modifications are necessary for the aircraft to maintain its mission effectiveness in conjunction with changing mission requirements. In FY00 Congress added \$3.5M for the U-2 Dual Data Link (DDL).

Aircraft Breakdown: Active 35, Reserve 0, ANG 0

**Development Status**  
N/A

**Projected Financial Plan**

	PRIOR		FY-99		FY-00		FY-01		FY-02		FY-03	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)												
PROCUREMENT (3010)												
INSTALL KITS												
KITS NONRECUR												
EQUIPMENT												
EQUIP NONREC												
CHANGE ORDERS												
DATA												
SIM/TRAINER												
SUPPORT-EQUIP												
TOTAL COST (BP-1100)												
(Totals may not add due to rounding)												



(Continued)

UNCLASSIFIED

Fact Sheet: DARP MN-4600 U-2 DUAL DATA LINK (DDL)

(Continued)

	FY-04		FY-05		TO COMP		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT&E (3600)								
PROCUREMENT (3010)								
INSTALL KITS								
KITS NONRECUR	[2]	8.4	[2]	12.6			[10]	45.5
EQUIPMENT								
EQUIP NONREC								
CHANGE ORDERS								
DATA								
SIM/TRAINER								
SUPPORT-EQUIP								
TOTAL COST (BP-1100)		8.4		12.6				45.5
(Totals may not add due to rounding)								

Method of Implementation: DEPOT Initial Lead Time: 0 Months Follow-On Lead Time: 0 Months

Milestones

FY-00

Contract Date (Month/CY)

Delivery Date (Month/CY)

Installation Schedule

	FY-00			
Quarters	1	2	3	4
Input				
Output				